Merit Review: Changes Blowing in the Wind

Last year LAB NEWS ran its first-ever story on Sandia's performance evaluation system (Aug. 1, 1986). At the time, Ralph Bonner, Director of Personnel 3500, pointed out that the system is not carved in stone

Prophetic words, those. All non-represented Sandians will see a series of changes in the performance evaluation process in 1987 (see "Changes Focus on Job Requirements"), and people on the administrative side of the house (MLS staff and management) will note differences in how jobs are grouped together within a given salary range (see "The 14-Level Plan").

"Management believes that all employees should have a clear understanding of compensation philosophies, policies, and practices," says Ralph. "So, since the end of March, we've presented orientation sessions on the new system for both supervisors and staff people."

Members of the orientation session training teams were Ralph, Art Davie (3000), Danny Brown (3520), Art Arenholz (3710), Bob Kelly (3450), Ami Goodman (3552), Mike Robertson (3533), and John Ledwith (3552).

Some Things Don't Change

Don't get the idea that every aspect of these programs has changed. As emphasized in the Aug. 1 article, a major objective of performance review is to ensure regular and formal communication between supervisor and staff member; that's still one of the main goals. "It's a time to focus on organizational and individual responsibilities," says Marv Torneby, manager of Personnel Department 3530. "And performance review communication should be a twoway street. Staff people learn exactly what the job requirements are, and how management views their overall performance relative to those job requirements. On the other hand, supervisors often can pick up on ways to improve their organizations' effectiveness and productivity by listening to employees' suggestions

"We hope, of course, there's an ongoing dialogue between supervisors and staff members throughout the year," continues Marv. "The annual appraisal meeting is just one more opportunity to express views. But it's an important part of performance evaluation."

Competitive Pay

Sandia will continue to hire top people and to pay them competitively. "We can't afford *not* to [hire high-quality staff]," says VP Art Davie (3000). "People are still our most important asset. How well they do their jobs is certainly the key factor in determining how well Sandia fulfills its mission as a national laboratory.

"Compensation represents an investment in people. Just as we all try to invest most in programs where we'll get the greatest return, Sandia's compensation program tries to focus most on results — pay for performance. We think the 1987 changes [in performance evaluation] reflect that philosophy. They will reinforce our goal of excellence in all we do by attracting, retaining, and motivating an exceptional work force."

Changes don't just occur; there are reasons behind them. The impetus here was twofold: Sandia's AT&T connection, for changes in salary administration (see "The AT&T Connection"); and input from department managers, division supervisors, and committees from both technical and administrative organizations (see "A Matter of Fine-Tuning" and "Thinkers and Doers"), for changes in performance evaluation.

This issue of LAB NEWS covers most of the differences you'll experience during 1987 merit review — most, but probably not all. If you have questions about "the system," discuss them with your supervisor.

•PW



ART DAVIE (3000): "People are still our most important asset. How well they do their jobs is certainly the key factor in determining how well Sandia fulfills its mission as a national laboratory."

More on Performance
And Compensation
— Begins on Page Five



Claassen Retires May 31

John Crawford Named VP 8000

John Crawford, Director of Weapon Development 5100, has been named vice-president responsible for weapon development, engineering design, combustion and applied research, and component and systems research at Livermore, effective June 1. He replaces Dick Claassen, who retires May 31.

"I'm very excited about the opportunity to be part of Sandia Livermore," John says. "I've worked with a lot of the people there over the years — it's an outstanding group."

John joined the Labs in March 1962 as a member of the Magneto Physics Research Division where he worked in physics research on explosively driven high-energy generators and plasma experiments. He was appointed supervisor of the Solid State Elec-

Aprilfest II
Stories, Pix
— See Pages
Ten and Eleven

tronics Division in June 1967. In June 1971, John became manager of the Electron Tube Development Department. He was appointed director of Electrochemical Components and Measurement Systems 2500 in August 1977 and was chosen director of Weapon Development 5100 in July 1983.

"I've enjoyed the job in 5100 a great deal," John says. "I've been in Albuquerque for 25 years, so Livermore will be a substantial change, one I look

forward to. I'll try to continue in the tradition Burnie Biggs, Tom Cook, and Dick Claassen started out there."

He has a BS in physics and mathematics from Phillips University, and an MS and a PhD in physics from Kansas State University.

John enjoys playing bluegrass banjo, jogging, and skiing. He and his wife Mary Ann have two grown daughters.



DURING LAB NEWS INTER-VIEW on May 1, while discussing his appointment as VP 8000, John Crawford (5100) got the official phone call from Dick Claassen (8000) offering him the Livermore slot. "Thank you, sir; I formally accept," John was saying as this photo was snapped.

Antojitos

Congratulations, John Crawford. You're Sandia's choice for what your predecessor calls Sandia's plum assignment. That is, you're heading out to head what used to be called the Livermore Branch (until Sandians realized that the image of a tree with just one branch was not exactly flattering). You're wending your way West in the illustrious footsteps of Burnie Biggs, Tom Cook, and Dick Claassen.

Tom says he's "just really tickled that John is coming out," according to a story in the <u>Tri-Valley Herald</u>. "He's a very friendly, cooperative, down-to-earth person. Everyone will like John."

But John's not just another Sandia Good Guy: "He has a very nice background to cover the span of technical activities that we have here," says Dick in the same article.

Dick told John (says a story in <u>The Valley Times</u>) that since he's "lucky enough to get a good organization, he should take care of it."

I moved to Livermore 10 years ago -- but not, I hasten to add, as a VP. Nevertheless, I know it's not easy leaving the mother ship -- but the natives are friendly (remember to take trinkets). You'll have a great time! And, judging by your reputation in 5100 and, on the personal level, by your willingness to help us LAB NEWSers with the weapon history issue we put out for Family Day, the Livermore folks will enjoy your leadership -- once they get you properly mellowed out.

And Congratulations, Heinz Schmitt. You're taking over John's post in a key directorate, and you've certainly got the qualifications for that tough job -- Your bio includes exploratory development, RV test beds (precursor to SWERVE), the weapons program (especially the W80), components (specifically, design definition, including CAD/CAM, an area where you helped Sandia earn the lead lab role for the entire weapon complex), and, most recently, Systems Evaluation (including QA, safety, and reliability). P.S. Let us know when you've decided what you want to be when you grow up.

<u>Tradition Toppled</u> A small but significant barrier to interpersonal communications at Sandia was 75 percent destroyed last week in the Organizational Change Notice announcing Dick's retirement, John's promotion, Heinz's lateral move, and Bob Peurifoy's acting directorship of 7200.

That historic May 1 OCN actually used first names -- not just initials -- in listing three of the four people involved! I plan to frame it. You see, we've had two conflicting traditions around here forever. One is that we pride ourselves on being a "first name" kind of place; the other is that OCNs, job postings, and many organizational listings in the phone book use only initials and last names.

For no better reason than tradition, we've retained the initials practice long after AT&T discarded it. It gets in the way of knowing who's been promoted or who has a job opening. Worse, looking someone up in the phone book when only initials are shown is a pain -- "Is Mr. T. J. Smith there?" "This is Ms. Theresa Smith."

So, along with framing the OCN, I plan to help bury the initials tradition. And if/when we succeed, I plan to dance on the grave. •BH

For John Crawford: Cuando una puerta se cierra dos mil se abren. (When one door is closed, two thousand are opened.)



EXUBERANT GOLFER Rodger Page (8164) recently shot a hole-in-one, his first in 35 years of playing, on the 134 yard, par 3, fifth hole at Pleasanton Fairways golf course. Rodger, president of the Sandia Employees Golf Club, wasn't playing with Sandians that day. Witnessing his stroke of luck were the others in his foursome: his wife Jorene, P.J. Leonard, and Dan Schmid. The golf course presented him with a trophy but no free car or cash award — his hole-in-one wasn't shot during a tournament.



LIVERMORE RETIREE Bob Schultz (8182)

THE LAB NEWS

Published Fortnightly on Fridays

SANDIA NATIONAL LABORATORIES

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Audit Begins Monday

I&E Inspectors to ScrutinizeSandia Security

May means final exam time for Sandia Albuquerque's security organizations. DOE's I&E (Inspection and Evaluation) teams will conduct an intensive appraisal of security readiness from May 11 through 22.

The teams are expected to concentrate on Sandia's computer security, material control and accountability, physical security procedures, intrusion detection and access control systems, and protective force operations.

"In all probability, few Sandians outside the organizations directly involved will be affected by the I&E audit," says Don Jerome, supervisor of Security Plans, Coordination, and Awareness Div. 3432. "But it's possible that an audit team member could ask any Sandian how he or she would respond to a given security-related problem. If the question is one that's applicable to your job, you'd be expected to know the answer. So it's a good time to brush up on your security responsibilities."

The visiting inspectors will be identified by green Sandia visitor badges labeled "I&E" and will be accompanied by a Sandia security representative. That representative will assist an employee who is unsure that an I&E inspector's line of inquiry is appropriate.

"Security is everyone's business," says President Welber. "And we're certainly taking the I&E inspection seriously. That doesn't mean that we expect every employee to know everything there is to know about security. But it does mean that we all need to know — and be ready to share with the I&E inspectors — security as it pertains to our job.

"The I&E challenge is indeed difficult. And it properly should be — it must reflect the real threat to Sandia," continues Irwin. "Although I'm confident that our security program is basically sound, meeting that threat, and the I&E challenge, is a Labs responsibility — not just a security organization problem."

Third Supercomputer Arrives at Livermore

Computer capacity at the Central Computing Facility (CCF) in Livermore has more than doubled with the arrival of the Cray X-MP/24 on April 20. The \$17 million machine has two processors and four million words of memory. It's equivalent to the two Cray-1 machines now in the CCF — and then some.

According to Bill Wilson, manager of Computations Department 8230, the new computer will mean a significant increase in computer capacity for the weapons program. "Supercomputers such as the X-MP are absolutely essential in keeping our weapons program second to none," Bill notes. "They enable us to make progress in complex structural mechanics designs, to understand insensitive high explosives, and to model gaseous embrittlement and rocket plumes.

"Furthermore, computers have saved us hundreds of thousands of dollars in tests, and months of vital design time."

The new Cray went into full production Monday (May 4), running the Cray Time Sharing System (CTSS). Mechanical designers and others had a backlog of work that they immediately put into the new machine. In comparison to the other mainframe computers in the CCF, this Cray has twice the memory and can solve problems in half the time.

In addition, the new system has 12 high-speed DD49 disks. These disks transfer data at more than twice the speed of the DD29 disks used by the Cray-1 machines and are driven by an Input/Output Subsystem (IOS) that leaves the Central Processing Unit (CPU) free for computation-intensive tasks.

For special applications, users may place their files on a Solid-state Storage Device (SSD). Although the SSD has less than 2 percent of the DD29 disk capacity, it transfers data to the X-MP at more than 10 times the disk speed. The SSD makes it feasible to do those problems that were previously much too large to fit in the memory of a Cray-1 and that would take too long to read in from disk.

This "new" Cray came from Sandia Albuquerque. "Because we lacked the funds to purchase computers to match projected needs at Albuquerque and Livermore, the X-MP was moved to Livermore to equalize the shortfall at both sites," says Ron Detry, Director of Engineering Design 8200. Linked by cable to the X-MP/24 when it was in Albuquerque, SNLL then accounted for about 30 percent of its load. SNLA recently installed a Cray X-MP/416, which is also available to Livermore users.

Congratulations

Terri (8150) and Bob (8025) Czapinski, a daughter, Jennifer Christine, April 17.

Jill Green (8272) and Steve Schwegel (8271), married at Lake Tahoe, April 18.

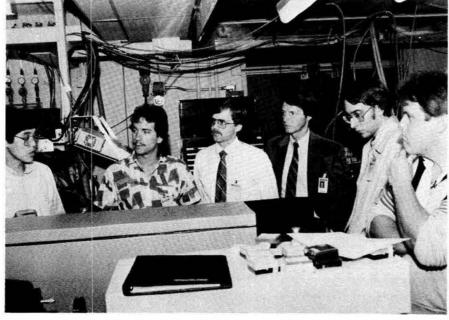
What's in a Name?

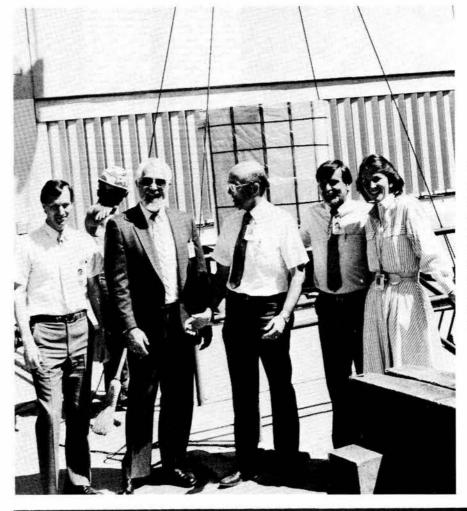


New York and Toronto bankers have a new name for yuppies: dincs — double income, no children. Other sources make it dinks - double income, no kids.]

Wall Street Journal

TOURING SANDIA LIVER-MORE recently were members of the IEEE chapter from the Oregon Institute of Technology. Following a briefing at the Combustion Research Facility, the 30 students toured the CRF labs. Here, Roger Farrow (8354, left) explains the operation of the Sirius Nd:YAG pumped-dye laser. David Rosenzweig (8022) is third from right.





"IT WAS THE ONE THING I couldn't leave in Albuquerque," explains Ron Detry (formerly 2600, now 8200, center) to (from left) Bruce Dale (8236), Cray sales representative Howard Watts, Bill Wilson (8230), and Dona Crawford (8235) as SNLL's latest Cray supercomputer is lowered into basement Computing Center.



Second Award for Device

Microanalyzer Work Wins Tech Transfer Award

Monte Nichols and Dale Boehme (both 8313) have been honored by the Federal Laboratory Consortium (FLC) for their successful efforts in transferring the technology of a newly developed scientific instrument — an X-ray microanalyzer — to U.S.

They received one of several Special Awards for Excellence in Technology Transfer that the FLC presents each year. Dale accepted the award on May 5 during the FLC's spring meeting in Lexington, Ky.

The awards go to people at federally funded laboratories and research institutions who have done an outstanding job of moving new technology to the marketplace or to other areas where it can be used. The Sandia researchers were honored for their transfer

of the X-ray microanalyzer concept to a firm that now manufactures and markets a similar instrument.

Monte did the original conceptual design for the analyzer, then developed it with the collaboration of Dale and Dick Ryon of LLNL. Monte and Dale then worked closely with the Kevex Corporation of Foster City, Calif., which incorporated some of their ideas into an instrument that is now commercially available.

The microanalyzer is the first scientific instrument that allows simultaneous measurement of X-ray fluorescence, X-ray absorption, and electron density from the same small sample volume of a material.

The Sandia microanalyzer can determine nondestructively — the elemental chemical composition of a sample to a depth of several tens of micrometres (depending on sample composition) and then produce an image map of the sample composition (see LAB NEWS, Sept. 26, 1986).

"I believe the instrument will find numerous applications in materials development, fabrication, and manufacturing," says Monte. "It offers substantial improvements over some current methods used for inspection and quality control in semiconductor and integrated circuit manufacturing facilities."

In September 1986, Research & Development magazine named the microanalyzer one of the previous year's 100 most-significant new technical products in an international competition.

The Federal Laboratory Consortium represents more than 300 R&D laboratories and centers from 10 federal government agencies. FLC members plan and operate programs to identify and move applicable technology to interested businesses, industry, and other government agencies.

'Can We Talk?' #2 or **Myths of Mental Illness**

by Arlene Price (3330)



Myth Number One: Everyone who seeks professional help is mentally ill.

Not so. Many of us experience mental distress that is not serious enough to be classified as mental illness.

In fact, the majority of people who seek professional help are not mentally ill at

all. They are suffering from the daily stresses of life, which may create anger, fear, depression, or guilt.

For example, have you ever found yourself worrying too much or over-reacting to a situation? Have you ever behaved in such a way that it interfered with your ability to get along with others, finish your work, enjoy pleasurable activities, or accomplish your goals? Have you ever suffered the loss of a loved one through death or divorce, experienced financial setbacks, worried about family members, or your work?

If so, you have experienced the kinds of emotional distress for which people commonly — and wisely - seek professional help. But you are not "mentally ill."

So what is mental illness anyway? There is no one simple answer. The human mind, like the human body, still remains a mystery.

Yes, we live in an age where more and more have been learned about both. But, even so, many otherwise intelligent people have an unreasoning fear of those who are mentally ill. The cause is simple: We fear the unknown. We are uncomfortable around people who are suffering from mental illness, who appear to be "different." We tend to avoid them, we sometimes ridicule them, we often get impatient with them — in short, we're afraid of them.

No, I didn't define "mental illness." My purpose here is not to define it but to dispel some pervasive myths about it — one down, two to go.

Myth Number Two: All mentally ill people are dangerous.

This is a biggie. Certainly there are mentally ill people who are dangerous, but they are a very small — albeit very well publicized — minority.

In reality, people with severe mental illness are far more likely to be passive than assaultive or even

assertive. Usually they fear you even more than you do them. They are much more likely to retreat from you rather than confront you, to be submissive rather than aggressive.

I believe the "they're dangerous" myth, which exploits our fear of the unknown, is often used to make TV programs, movies, and fiction more interesting, more commercially attractive. So the mass media help to perpetuate this myth of dangerousness.

Research indicates that the media have helped to condition in viewers and readers a subtle set of negative attitudes toward the idea of "mental illness." It's those attitudes that can make people who would otherwise benefit from professional help too embarrassed or ashamed to seek it. (Luckily, others seek help in spite of these attitudes because they wish to try to make a better life for themselves.)

Myth Number Three: The therapist is omni-

Another long-standing myth, helped along also by the media, is the unrealistic belief that the professional therapist is able to quickly "read your mind," size up the situation, and produce an instant

Although this myth is appealing — everyone would like a quick and easy fix — the real world may demand that you spend a lifetime establishing behavior patterns, typical ways of relating to others, and problem-solving styles that are appropriate for you.

No, you cannot merely appear in a therapist's office and passively absorb a magical cure. It has to be a collaboration that commits you and the specialist to work together over the time it takes to establish goals, define issues, identify behavior problems, and develop strategies to change.

The point is this: Most people who do seek professional help with emotional problems are no different from those who do not. The main difference is that the former may be a step closer to facing up to — and conquering — their problems.

If you are interested in obtaining further information, please call me on 6-0021.

This is the second in a series of "Can We Talk" articles by Sandia's clinical psychologist, Arlene Price.



ED CASSIDY (3552)

Supervisory **Appointment**

ED CASSIDY to supervisor of Salary Administration Division 3552, effective April 16.

Ed joined Sandia in October 1962 as a personnel representative assigned to the Environmental Test and Field Test organization. In October 1966 he joined the Position Evaluation Classification Division and, in November 1976, the Salary Administration Division.

He has an AB in education from DePauw University in Greencastle, Ind., and an MBA from Northwestern University. He worked for Midwest Molding and Manufacturing Company before joining Sandia.

Ed is a member of the American Compensation Association. He is active in politics at the county and state level. Ed's wife Patricia is a Bernalillo County Commissioner.

They have one son and live in the Northeast Heights.

Improvisational Technology



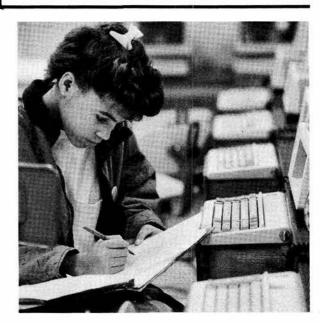
Our man with the hardware incompatibility needed to convert a 25-pin plug (male) to a socket (female). After a fruitless traipse around the electronics shops, he wearily explained his requirement yet again. "Oh, yes," replied the sales assistant, "what

you need is a gender bender," and promptly supplied the

New Scientist



VOLUNTEER INSTRUCTOR Roberta Ingram (7254) taught Abduhla McKellum, 13, the ins and outs of computers during a six-week computer literacy and applications course sponsored by Sandia's Black Outreach Committee and the National Technical Association. Black students in the Albuquerque Public Schools, grades 6-12. were eligible for the twice-a-week classes, which met at the APS Career Enrichment Center; 35 students completed the course. The program was a "first" for the Black Outreach Committee, reports coordinator Patricia Salisbury (3510). Besides Roberta, other Sandia volunteers included Larry Stevenson (5123), Lacey Learson (3428), Ned Adams (7242), Yollande Chang (2634), and Lance Gordon (2632).



MANZANO HIGH SCHOOL student Angela Crawford showed up early to study for Roberta Ingram's (7254) computer class at the Career Enrichment Center. "The students were really very dedicated and enthusiastic," says Roberta. "I was tremendously pleased with their progress."

The 14-Level Plan: How It Affects Us

The world of salary administration is a murky one for most of us. Job points, pay bands, salary target positions. They're all phrases we've heard; we know they affect us. But how? And what's this about a new system called the 14-Level Plan?

"After divestiture and reorganization, AT&T found itself with some 20 different salary plans at different locations," says Dick Shepardson, manager of Salary Administration Department 3550. "To standardize salary treatment for all employees throughout AT&T, the company adopted the 14-Level Plan at the beginning of 1986 and used it during last year's merit review. The plan covers all employees, with the exception of MTSs at Bell Labs and Technical Professionals at AT&T Technologies."

Collapsing the 'Pay Points'

"So for the last year, Sandia's been the only organization in the AT&T 'family' not on the 14-Level Plan," explains Dick. "Since the DOE contract with AT&T stipulates that Labs management practices follow those of AT&T, it was decided we would adopt the plan this year. For us, implementing the 14-Level Plan meant collapsing some 20+ pay points [salary levels] to 12 for those employees included in the plan — MLSs and MLS management. (For the time being, Sandia is using levels 3-14; it has no jobs in levels 1 and 2.)

"Jobs that were at different pay points are now grouped together within a given salary range," Dick continues. "Average job point spreads in each of the 14 levels are greater than they were in the old MLS Alpha Bands — J, K, L, and so on. The result: Different-band jobs in the previous system may now be grouped in the same level, and some jobs that were in the same band are now in different levels. So relationships of jobs have changed."

MTSs Not in Plan

MTSs are not included in the plan because their jobs are not "scored," as are MLS jobs. Scoring involves assigning a point value to jobs to reflect their relative value to the Labs. "MTS jobs are not sufficiently definable, so we traditionally haven't scored them," says John McAuliffe, supervisor of Position Evaluation and Job Classification Division 3551. "The 14-Level Plan applies to MLS staff and supervisors who are exempt from the overtime provisions of the Fair Labor Standards Act; therefore, MAs are not included in the plan either.'

Going to the 14-Level Plan also meant re-evaluating and rescoring all affected jobs, using the Hay evaluation system. (The Hay system, which has gained international acceptance by large companies, was also used by AT&T when it implemented the plan). That process began in April 1986 and continued until the end of the year. It's the first time that Sandia has evaluated all 450 + MLS-and-up jobs at the same time (see "Evaluating Jobs").

MLS non-supervisors were evaluated as a group in 1983-84, and supervisors in 1982, according to John. "The 1986 evaluation allowed us to take a look

> ALL MLS POSITIONS FIT INTO THE 14 LEVEL STRUCTURE

CHART SHOWS OCCUPA-TION TYPES in the 14-Level LEVEL Plan, ranging from MLS nonsupervisors to directors and above. It's actually a 12-level structure at Sandia, since levels

1 and 2 are not used. (Chart

by Nathan Golden, 3552)



DICK SHEPARDSON (3550): "Jobs that were at different pay points are now grouped together within a given salary range . . . So relationships of jobs have changed."

at changes in job content since previous evaluations," he says. "Also, to ensure consistency with AT&T's plan, we used Hay job evaluation charts, whose matrices are the industry standard. We are now more in line with Hay norms, as well as those of AT&T."

New job scores were effective March 16, along with placement in one of the levels under the new system. You can get specifics on your job — what level you're in, for example — from your supervisor. In general, here's how jobs fit into various levels:

- MLS non-supervisors levels 3-7, with almost 62 percent in level 4. Most people in Bands J, K, and L moved into level 4; most Ms and Ns moved into levels 5 and 6, respectively.
- Section supervisors levels 3-6, with about 50 percent in level 4.
- Division supervisors levels 6-8, with almost 51 percent in level 7.
- Department managers levels 9-10, with about 77 percent in level 9.
- Directors and above levels 11-14.

The 14-Level Plan establishes a different situation for new hires. The plan eliminates the E Band (entry band) for new employees, replacing it with a position level that's one level below the experiencelevel band for the job. For instance, an inexperienced MLS new hire who will eventually be placed in a level 4 job is placed in level 3 to start. Previously, he or she was assigned to the E Band for two to three years, had job responsibilities similar to MLSs in

14

Bands J through L (but no specific job description), and was not included in the formal annual salary and performance review. That same person now goes into the level that's

one below the eventual job, has specific assignments, and is included in regular salary and performance review after he or she has been on roll for six months.

In addition, a New-Employee Performance Review is in place as of this year for MLSs on roll less than two years. Supervisors will review new hires' performance semiannually (early spring and fall). "This system [New-Employee Performance Review] provides frequent feedback to new employees and a way for supervisors to identify and monitor early performance trends," says Marv Torneby (3530). "It's another way to promote openness and understanding, which are crucial ingredients in the [salary review and performance evaluation] process.'

Long-term Strategy

Last year John Ledwith of Salary Administration Division 3552 completed a study integrating compensation philosophy with broader business goals (see "Compensation Philosophy"). "Putting functional goals in place establishes a long-term base for decision making in the future," says John. "The 14-Level Plan, based on industrial norms, serves as a good yardstick for helping us ensure continued [pay] competitiveness with outside companies. It also makes the Labs consistent with AT&T practices.

"Employees should remember that financial

(Continued on Next Page)

The AT&T Connection

Sandia's "AT&T connection" has been around for a long time — since 1949, when AT&T took over management of the Labs for the federal government. Through the years, Labs management practices — adjusted for local conditions — have followed those of AT&T, as stipulated in the contract between DOE and AT&T.

The connection has been a good one for Sandia, according to Art Davie, VP Administration 3000. "Following AT&T's administrative practices has benefited the Labs over the long haul," says Art. "We have a set of policies and procedures in place that has helped us manage the Labs more like a business. That's gone a long way toward building, within DOE, our reputation as a well-managed laboratory.

"On occasion, policy changes at AT&T may, at first glance, appear not to be advantageous for Sandia," Art continues. "But we can't take the position that we're only going to pick what we think are the best policies of AT&T, and reject what we perceive to be the negative ones. In general, when AT&T makes a change, our bias is that we should follow it.

"However, we're not going to do things that have negative aspects for us," Art continues. "We have the latitude to implement AT&T policies in ways that mesh with Sandia's environmental and local conditions. But when we do that, we need to clarify why we should be different - and our reasoning has to be credible.

"That's what I think we've done with the 14-Level Plan. We've adopted most aspects of the plan as AT&T operates it. However, we chose not to include some portions [for example, we don't use levels 1 and 2] because they didn't make sense for Sandia. AT&T understands our rationale. There may be a few rough edges this year, because the system is brand-new. But we'll just have to work our way through the transition, keeping in mind our long-range objectives."

13 12 11

OCCUPATION TYPE

(Continued from Preceding Page)

14-Level Plan

[salary] rewards are not guaranteed; they are earned," continues John. "No one is *entitled* to a salary increase or cash award [see "Performance Evaluation"]. Supervisors base their decisions to grant salary increases and nonpermanent compensation on performance, salary position in the salary range, and available budget.

"The changes to the salary program will help us to significantly differentiate pay, based on individual performance and contribution," John concludes. "And focusing on results is an important philosophical goal of Sandia's compensation program."



Settling (on) a Score

Evaluating Jobs: How It's Done

Evaluating all of Sandia's administrative jobs (MLS staff and management) during a nine-month period last year was no easy undertaking. Nevertheless, the task had to be done before the Labs could adopt the 14-level salary administration plan in 1987.

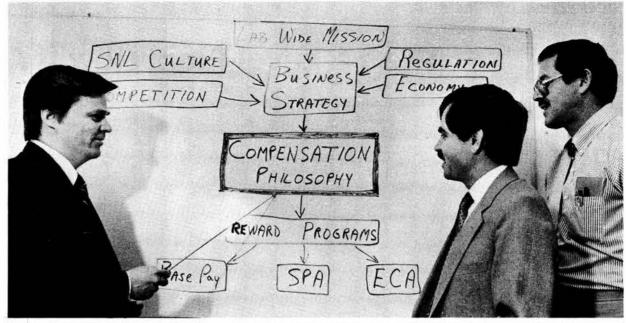
Administrative jobs are "scored" — assigned point values — reflecting their relationship to each other and their impact on the Labs. That procedure has been around since the early 60s, according to John McAuliffe, supervisor of Position Evaluation and Job Classification Division 3551. "We use a jobscoring plan developed by the Hay organization," says John.

The Hay evaluation system, used by many large companies in this country and elsewhere, scores jobs on the basis of three factors — know-how, problem solving, and accountability. They're defined as follows:

- Know-how overall "savvy"; the sum total
 of every skill and knowledge, no matter how
 acquired, required to do the job.
- Problem Solving the amount of original, "self-starting" thinking required by the job.
- Accountability answerability for an action and its consequences.

To determine the score on a given job, the evaluator assigns points for each of the three factors, with know-how receiving the most weight. Though the other two factors aren't weighted as heavily, they could be the differentiators in determining the relative worth of jobs to a company.

The evaluation process on administrative jobs began in April 1986. Members of the Labs' Evaluation Committee, in on it from the beginning, put in



JOHN LEDWITH (3552, left) discusses the results of a compensation philosophy study he conducted last year with John McAuliffe (center), supervisor of Position Evaluation and Job Classification Div. 3551, and Ed Cassidy, supervisor of Salary Administration Div. 3552.

Compensation Philosophy: The Goals Are Many

John Ledwith (3552) interviewed more than 25 Sandians — many in top management — for a study on compensation philosophy last year. "The interviewees made it quite clear that the Labs' goal of ensuring the national security through a commitment to excellence depends, in large part, on hiring and motivating high-quality people," says John. "Rewarding employees appropriately for their contributions is a key ingredient.

"Sandia's compensation system, with its focus on results and individual performance related to job requirements, lays the groundwork for that [appropriate rewards]," continues John.

John's study includes a summary of management goals related to compensation philosophy:

- To reinforce the organizational goals of excellence by attracting, retaining, and motivating an exceptional work force.
- To significantly differentiate pay in a fair

and consistent way, based on individual performance and contribution (focusing on results and the importance of teamwork).

- To maintain salaries that are competitive with those of exceptional people in comparable positions at other companies.
- To foster openness and understanding by employees, supervisors, and managers, thus deriving maximum motivational return on our compensation investment.
- To ensure that programs support organizational needs through the ongoing input of line supervisors and managers.
- To ensure that programs do not discriminate on the basis of sex, race, age, or any other basis prohibited by law.
- To ensure compliance with all legal and contractual requirements.

many long hours on the project. After receiving training on all aspects of the Hay evaluation system from Hay consultants, they began their first major task: evaluating 100 MLS, section supervisor, and division supervisor "benchmark" jobs selected by Div. 3551.

Benchmark Jobs

"The benchmarks are representative of many jobs in all administrative organizations, and are jobs to which other jobs can be compared," says John. "For this evaluation, we made sure that job descriptions for the benchmarks were current and complete, and that Committee members understood the content of each benchmark job very well."

Committee members, with support from Hay consultants and members of Div. 3551 (Dave Palmer, Bob Velasquez, and Rochelle Lari), scored all 100 benchmarks by the end of July. With job descriptions in hand, the evaluators assigned points to each benchmark, based on each of the three Hay factors. Committee agreement was required on each of the benchmark scores. "It was a time-consuming process," says Danny Brown (3520), member of the Evaluation Committee. "We estimate that each benchmark required more than 10 person-hours to evaluate, so we're looking at a time total in excess of 1000 hours."

Evaluation Committee

Thinkers and Doers

Sandia's Evaluation Committee provided many of the recommendations behind changes we're seeing in salary administration and performance evaluation for people on the administrative side of the house. Although Committee members put in many hours since last April on rescoring MLS jobs — a step necessary before Sandia adopted the 14-level job evaluation plan (see "Evaluating Jobs"), they didn't stop there.

They also took time to listen carefully to department managers' and division supervisors' suggestions for improving the Labs' performance evaluation process. Using this information, the Committee, headed by Dick Shepardson (3550), recommended changes in the system — very noticeable changes that affect many people (see "Performance Evaluation").

Committee members - nine department

managers — represent many different administrative areas, including those at Sandia Livermore. Besides Dick, they are: Dick Andes (120), Kelly Montoya (2630), Doug Robertson (3140), Bob Kelly (3450), Danny Brown (3520), Art Arenholz (3710), Gerry Barr (7860), and Arnie Schuknecht (8020).

"We were all aware that we'd taken on a big responsibility," says Dick Shepardson. "Any time you're thinking about changes that touch a lot of people — and their pocketbooks — you realize the importance of making good decisions. One of our [the Committee's] major goals was to provide a performance review system that encourages motivation, self-development, and a high level of contribution from employees. We think the 1987 changes will go a long way toward fulfilling that goal."

Industrial Standard

During the same time period, department manager and director benchmarks were initially evaluated by Hay consultants, then reviewed by 3550 for consistency. Once benchmark scoring was complete, Hay evaluated a representative sample (all levels) against the industrial standard to ensure that Sandia job scores were comparable to those of outside jobs with similar responsibilities.

"We didn't have to go back to the drawing board," says John McAuliffe. "Labs jobs tied almost exactly into the industrial standard. We're very proud of that, given the fact that Sandia was the only AT&T entity to implement its own benchmark system. [Benchmark jobs at other locations were established by a corporate AT&T committee.] Our evaluators were right on target."

The process didn't stop there, however. Next,

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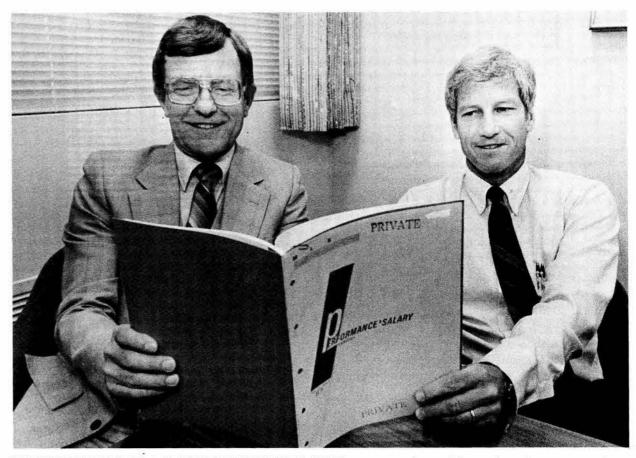
Evaluating Jobs

Div. 3551 scored all remaining jobs, based on the benchmark results. Then the MLS Committee "sore-thumbed" all job scores to ensure internal equity. "We took a look at all the jobs, once scored, to make sure that none of them stood out like the proverbial sore thumb in relation to other jobs in the same organization," explains Danny Brown. "Then the Hay people validated the scores, checking them both for internal and external consistency [the latter with the Hay evaluation system]."

Last Step

The last step was a review by directors of job scores in their organizations. The Evaluation Committee reviewed job scores appealed by directors, and rescored them, if necessary. New job scores were effective March 16.

"The Hay evaluation system is the most widely used in the world," says John McAuliffe, "and it provides a broad industrial base for comparison purposes — some 500 companies. It doesn't deal with laws of nature, so it can't be called scientific. However, if a company uses the system properly for job evaluation, it provides equal treatment for, and a consistent approach to, all jobs in the plan. And those are primary goals of Sandia's salary administration program."



MARV TORNEBY (3530, left) AND RALPH BONNER (3500) compare notes on this year's performance evaluation changes.

Performance Evaluation

Changes Focus on Job Requirements, Pay for Performance

New descriptors, based on job requirements, take the place of old designators.

Nonpermanent compensation — advancement awards and special performance awards — provides additional ways to financially reward people.

These changes and others are in place for the 1987 performance evaluation process; the system has a whole new look.

The new look results from input by department managers and division supervisors who were dissatisfied with the previous system for a number of reasons. Mainly, they requested a process that was motivating for employees, rather than what many saw as demotivating — and a flexible system that allowed more room for managerial judgment.

Technical and Administrative

Performance evaluation changes affect people in both technical and administrative areas. On the technical side of the house, MTSs, TAs, TSAs, SATs, and STAs will notice differences, reflecting input from an *ad hoc* MTS Committee chartered by EVP Orval Jones (20), as well as from senior management. As for the administrative side, the Evaluation Committee listened to ideas from supervisors and managers and came up with major changes that affect everyone in the 14-level system (see "The 14-Level Plan"), plus MAs and staff secretaries.

"Some supervisors considered the performance designators demotivating," says Ralph Bonner (3500). "As we've said before, Sandians are achievers; many have never had anything but 'A' grades, for example. So when they hear a word like 'good' or 'mid-50' describing their performance, they feel that they received a 'C' — even though those designators said they were with the majority of a group of people for whom high standards are the norm. Supervisors said 'Let's get rid of designators with negative connotations, and come up with something more positive."

MTS Performance Band Values

For MTSs, new performance band values replace the old designators, which ranged on a number system from -4 to +5, with +0 and +1 in the middle ("mid-50"). The new bands range from a low of 1 to a high of 10. There's no translation for the numbers, as there was on the previous system (for example, a "+2" meant "very good"). "The new band values simply describe where people are in a range of performance, compared to their peers," says Marv Torneby (3530). "It's strictly a peer comparison system."

Outside the 1 to 10 bands, two separate categories — "needs improvement" and "unsatisfactory" — are in place as designators for those who clearly do not meet job requirements.

TAs, SATs, STAs, and TSAs will see a similar system, but with fewer band values because fewer people are in the system. ("Ten bands for the small

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A Matter of Fine-Tuning

Ad Hoc MTS Committee

Last fall, EVP Orval Jones (20) chartered a committee to take a look at the MTS salary review program. Committee members — all MTS division supervisors appointed by their respective vice-presidents — met several times in November and December, and then presented their ideas to both Orval and EVP Lee Bray (30).

Those suggestions led to the replacement of performance designators with performance band values. The committee also reviewed the idea of establishing Exceptional Contribution Awards for Sandians on the technical side of the house (see "Performance Evaluation").

Committee Members

Committee members were Jim Rice (1128), Wilson Barnard (2116), Neil Hartwigsen (5261), Dennis Engi (6201), Tom Priddy (7542), Jack Swearengen (8152), and Garry Brown (9011).

"We proposed a number of things needed to improve teamwork, performance review, salary administration, and communication at the supervisor/MTS interface," says committee spokesman Tom Priddy. "Changes, however, are relatively few for technical people this year; it was a matter of fine-tuning the old system, rather than a major overhaul.

"The committee is encouraged that Sandia's management is interested in positive changes in the salary administration process for members of the technical staff. Because of this, the commit-

tee will continue to investigate improvement concepts and to report suggested changes."



TOM PRIDDY (7542): "The committee is encouraged that Sandia's management is interested in positive changes in the salary administration process for members of the technical staff."

(Continued from Preceding Page)

Performance Evaluation

number of people involved would not be meaningful," says Marv.) Bands for this group range from a low of 1 to a high of 4, plus "needs improvement" and "unsatisfactory," as in the MTS system.

MLS Descriptors

For administrative people, the old designators are replaced by four new descriptors that emphasize performance relative to job requirements:

- consistently exceeds job requirements
- fully meets job requirements
- meets most job requirements
- · does not meet job requirements

The first three categories are used in the compensation system to reward people, while the last is reserved for employees who have significant performance problems.

Gone are the old designators: outstanding, very good, good 1-2-3, satisfactory, needs improvement, and unsatisfactory. "We [the committee] recommended that descriptors focus on job requirements," says Danny Brown (3520). "The Hay system scores job descriptions, not attributes of incumbents; the new descriptors follow through on that idea. How well a person does a job — as it's defined, with performance criteria set by the immediate supervisor — is the deciding factor."

Gone also is the forced distribution system. Previously, no more than five percent of the people in an MLS band (J, K, etc.) could be called "outstanding," and no more than 25 percent could be designated as "outstanding" and "very good." But forced distribution meant just that: The system required that band salaries balance at a set percentage of midpoint salary. So ranking 25 percent in the top two categories meant that same number in the bottom three categories, with 50 percent in the middle (good 1-2-3).

One Numbers Constraint

The new system has only one numbers constraint: No more than 40 percent of people within a level in a directorate can be described as "consistently exceeding job requirements." (The number can range from 0 to 40 percent.) The other descriptors have no percentage limitations, so supervisors have greater latitude in assigning realistic descriptors to employees.

"Employees should remember that their final descriptors don't depend only on the judgment of their immediate supervisors," says Marv Torneby. "That final descriptor reflects the collective judgment of management in the employee's organization [through director level]. In 1987, it will reflect management's assessment of performance against specific job requirements, and it also may reflect a comparison of performance to that of one's peers in the same or similar jobs."

Salary targets provide a way to ensure consistent salary treatment for those whose jobs have similar requirements. Within a level, the entire salary range reflects performance of employees whose jobs are in that level; targets range from 80 to 125 percent of midpoint for MLSs, and from 88 to 112 percent of midpoint for MAs (see charts). There's no targeted salary range for those not meeting job requirements.

"Target range differences for MLSs and MAs reflect a broader range of job responsibilities for MLSs, as well as a broader range of differences in performance," says John Ledwith (3552). "Salary target positions are long-range. If people are currently below salary target for their job and performance level, they can normally expect to reach it if they maintain a consistent performance level over a reasonable period of time. For instance, an MLS rated as 'consistently exceeding job requirements' for four to five consecutive years in the same job should be in the target range of 100 to 125 percent of midpoint dollars."

Another new wrinkle in the performance and salary administration system for administrative types



DANNY BROWN (3520): "How well a person does a job — as it's defined, with performance criteria set by the immediate supervisor — is the deciding factor."

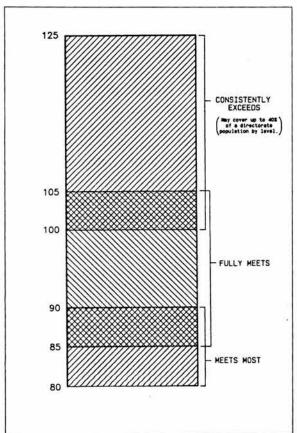
is establishment of one-time cash awards given for a couple of reasons: advancement to a higher level, or reward for exceptional performance.

Advancement awards are presented when an employee moves to a higher level. "The awards demonstrate management recognition that an employee has taken on more responsibility, even though there's no change in classification, only in level," says John Ledwith. MLS non-supervisors, section supervisors, and MAs are eligible for advancement awards.

Special performance awards, paid in one lump sum in early October, go to employees who've demonstrated exceptional performance during the current year. The awards also recognize special one-time accomplishments during the review period. MAs and everyone in the 14-Level Plan are eligible for the performance awards.

Though the cash awards don't increase base salary, they do — or may — affect certain benefits: pension (adds to yearly salary), life insurance (adds to

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MLS SALARY RANGE TARGET depends on descriptor employee receives during performance evaluation. For example, a person who fully meets job requirements would be targeted between 85 and 105 percent of midpoint salary for his or her level. Someone in the "meets most" category is targeted between 80 and 90 percent of midpoint.

Review Changes In a Nutshell

MTSs, TAs, SATs, STAs, TSAs

- Replacement of designators with performance band values
- Lump-sum cash awards (Exceptional Contribution Awards) to recognize special achievement. ECAs are not part of the normal salary review process; rather, they'll be awarded throughout the fiscal year.

MLS Staff and Management

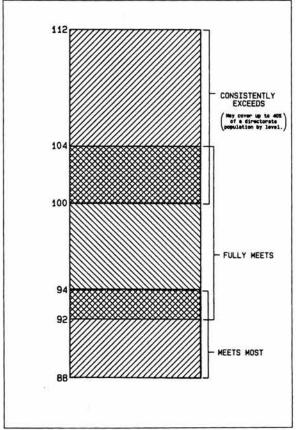
- 14-Level Plan (including new job evaluations and salary ranges)
- Replacement of designators with new performance descriptors; forced distribution eliminated (but those in "consistently exceeds" category may not exceed 40 percent within a salary range level in a directorate)
- Nonpermanent compensation: advancement awards (MLS, section supervisor only), special performance awards
- Elimination of time-in-level concept
- Establishment of specific performance criteria by supervisor with staff input
- E-Band (entry band) replaced with position level (one level below experience-level band for eventual job)
- New-Employee Performance Review (for people on roll less than two years, but at least three months)

MAs

- Replacement of designators with new performance descriptors; elimination of forced distribution
- Nonpermanent compensation: advancement awards, special performance awards
- Establishment of specific performance criteria by supervisor with staff input

Staff Secretaries

- Replacement of designators with new performance descriptors
- Nonpermanent compensation: special performance awards
- Establishment of specific performance criteria by supervisor with staff input



MA SALARIES RANGE from 88 to 112 percent of midpoint salary in a level, and depend on how well an employees handles job requirements. As an example, a person who consistently exceeds job requirements would have a salary target range between 100 and 112 percent of midpoint. (Charts by Nathan Golden, 3552)

Performance

total coverage), ESOP (adds to stock received, based on income), and savings plan (increased company contribution). And of course there are the deductions: federal tax (20 percent), state tax, savings plan (whatever percent you've chosen), and FICA (Social Security). Sandia's Board of Directors must approve the pension impact, which also requires DOE and IRS approval. Effects on life insurance may also require Board approval.

Could a person receive both an increase in base salary and a cash award? "It's possible," says John Ledwith. "For example, an employee who fully meets job requirements might be below the targeted salary range for his or her job. The person may also have completed an outstanding one-time project during the year. In that situation, the supervisor could decide to award both a salary increase and a special performance award."

MTS Cash Awards

MTSs, along with TAs, SATs, STAs, and TSAs, are eligible for Exceptional Contribution Awards (ECAs) — lump-sum cash awards that recognize special achievements during the year. "ECAs may be paid at any time during the year," explains Ed Cassidy (3552), who was a member of the support staff for the MTS Committee. "That's in contrast to the special performance awards for MAs and administrative professionals, which are tied in with performance evaluation and paid in early October.

"The ECA program is relatively modest, but it reaffirms management's belief that outstanding achievement deserves special recognition," says Ed. ECAs affect the same benefits — and have the same deductions — as the MLS special performance awards.

There's increased emphasis on pay for performance, rather than on pay treatment based on length of time on the job (time-in-level) and performance. Under the previous system, salary decisions were

Performance Evaluation Calendar

You're probably aware that performance evaluation is already under way for 1987. Last month, employees received a one-sheet form used during the evaluation process. By April 15, they'd completed the front side of the data sheet, listing major assignments and contributions for the year under review (April 1986 through March 1987). Here's the rest of the schedule:

· May-June

Directorate review process takes place. A working copy of the final "description of accomplishments" agreed on by employee and supervisor is used throughout the review by successive management levels. When the review is completed, working copies — with comments and notes from

higher management attached — go back to immediate supervisors, who summarize meaningful findings in a written evaluation (back side of form).

• July

Supervisors have appraisal meetings with employees to go over written evaluations, which reflect judgments developed by management concensus during the review process.

• August 1

Supervisors send original copies of data sheets to directors.

• September

Employees receive salary notification from supervisors.

based on a combination of performance, time on the job, and job level.

Previously, during the "growth period" (96 months for MLSs and 48 months for MAs), an employee's salary treatment was compared with that of peers who'd been in jobs for the same length of time. Time-in-level could be adjusted upward or downward when an employee changed levels or classifications. Once considered "mature," an employee received salary increases strictly on the basis of performance in comparison to other "mature" employees.

"With elimination of time-in-level, the entire salary range for a job level is used for pay for performance," says John Ledwith. "It means employees are evaluated strictly on the basis of job performance as related to job requirements, no matter how long they've been in a job — or how long their peers have been in a similar job.

"For supervisors, it means much more flexibility in differentiating pay for performance," continues John. "Before, there were very narrow salary ranges for given performance levels throughout the band; now those ranges are much broader. For employees, it means significantly higher rewards for top performers."

Under the previous system, performance criteria — job-related characteristics upon which a person is evaluated during performance review — were the same for all administrative jobs. Criteria included creativity and innovation; job-related knowledge and skill; quality, quantity, and reliability of work completed; and several others.

"Though the criteria were in place, they were not really formally communicated to employees, nor was there a requirement to define them," says Marv Torneby. "Under the new system, supervisors develop performance criteria that make the most sense for jobs in their organizations, and let employees know what those criteria are before the performance year starts. For the performance evaluation now in progress, that isn't possible; the review period began in April 1986. But the two [pre-announced performance criteria and performance evaluation] should mesh in future years.

"Ideally, performance criteria for jobs in an organization should reflect both supervisor and staff input," Marv continues. "That furthers our goal of an open and candid evaluation system that's well understood by everyone."

Events Calendar

May 8-10 — RV Rally, Midway and Flower Bldg., NM State Fairgrounds, 864-8175.

May 8-17 — "All Seasons and Every Light," the Vassar collection of American landscape paintings; 10 a.m.-5 p.m. Tues.-Fri., 1-5 p.m. Sat. & Sun.; Albuquerque Museum, 243-4600.

May 8-17 — "A . . . My Name Is Alice," musical review about women; 8 p.m. Fri. & Sat., 6 p.m. Sun.; Keystone Theatre (3211 Central NE), 255-6819.

May 8-17 — MA/MFA Exhibition, annual event showcasing work by UNM graduate art students; Upper West and Van Deren Coke galleries at UNM Art Museum, 277-4001.

May 8-17 — "Glengarry Glen Ross," presented by NM Repertory Theatre, David Mamet drama about unscrupulous real estate agents, 8 p.m. Tues.-Fri., 2 p.m. matinees Sat. & Sun.; KiMo Theatre, 243-4500.

May 8-17 — Exhibit, "Lucy Maki Paintings"; 10 a.m.-5 p.m. Tues.-Fri., 1-5 p.m. Sat. & Sun.; Jonson Gallery, UNM, 277-4967.

May 8-24 — "Beyond Therapy," comedy satire by Christopher Durang about a couple who meet through a personal ad and the not-so-helpful actions of their psychotherapists; 8 p.m. Fri. & Sat., 6 p.m. Sun.; Vortex Theatre (Central & Buena Vista), 247-8600.

May 8-26 — Photo exhibit by Diane Gutierrez of Santa Clara Pueblo; 9 a.m.-6 p.m. Mon.-Sun., Indian Pueblo Cultural Center, 843-7270.

May 8-26 — Exhibit, "Hispanic Women Artists," participants are native-born New Mexicans; South Broadway Cultural Center, 848-1320.

May 8-July 31 — Exhibit, "Maya: The Image from the Western World"; 9 a.m.-4 p.m. Mon.-Fri., 10 a.m.-4 p.m. Sat.; main gallery, Maxwell Museum of Anthropology, 277-4404. May 9 — Concert, UNM Symphony Orchestra, featuring winners of the 1987 Student Concerto Competition; 8:15 p.m., Keller Hall, free, 277-4402.

May 10 — Concert Series: St. Thomas of Canterbury Episcopal Church presents the Albuquerque Boys Choir; 4 p.m., 425 University NE, 247-2515.

May 10 — Annual "Mother's Day at the Zoo," NM Symphony Orchestra performing selection of light, popular music outdoors; 2 p.m., Rio Grande Zoological Park, 842-8565.

May 15-17 — Paint Horse Show, outdoor arena, NM State Fairgrounds, 265-1791.

May 15-17 — Classical Concert Series: NM Symphony Orchestra end-of-season performance; guest pianist, Grant Johannsen; works by Bernstein, Saint-Saëns, and Bartok; 8:15 p.m., Popejoy Hall, 842-8565.

May 15-16 & 22-23 — "Spirit Dreams," one-woman theatre piece about growing up female; 8 p.m., Albuquerque Little Theatre, 243-1673.

May 17 — San Ysidro Fiesta: arts & crafts, parade, food booths, entertainment; Corrales, 897-0598.

May 17 — New Mexico Wine & Beer Festival: more than 100 samples of amateur and commercial wines and beers, door prizes, entertainment; noon to 6 p.m., Agricultural Bldg., NM State Fairgrounds, 883-0000.

May 17 — Team roping, 10 a.m.-4 p.m., Bernalillo County Sheriff's Posse Arena (Edith & El Pueblo Rd. NE), free, 243-3696.

May 19 — "The Owl Was A Baker's Daughter," combination of theatre, film, and music that works like a dance; 8 p.m., KiMo Theatre, 848-1374.

May 20-25 — Quarter Horse Amateur Horse Show, indoor & outdoor arenas, NM State Fairgrounds, 265-1791.

Retiree Deaths

Cappi Lynn (78)	Jan. 1
Lynn Rigby (58)	Jan. 2
Martha Whitford (69)	Jan. 6
Richard Othmer (69)	Jan. 9
Stanley DeVault (76)	Jan. 11
Hardin Simmons (75)	Jan. 12
Ira Patterson (86)	Jan. 15
Al Dadian (81)	Jan. 16
Evelyn Renker (62)	Jan. 28
Pauline Welkenback (59)	Feb. 2
Louis Paddison (71)	Feb. 4
Byrd McKay (74)	Feb. 12
Tircio Ortega (74)	Feb. 16
Mark Elich (67)	Feb. 19
William Dickson (80)	Feb. 25
Hans Baerwald (82)	Feb. 27
Wayne Grimshaw (76)	March 4
Sam Rodocovich (71)	March 10
John Frizzel (72)	March 13
Thomas Arrington (77)	March 14
Louis Mecklenburg (73)	March 15
Melvin Mattison (59)	March 22
Charles Campbell (78)	March 26
Patricia Maurer (60)	March 29

Sympathy

To Marrian Salomon (2124) on the death of her mother in Albuquerque, March 18.

To Dale Marsh (3426) on the death of his grandmother in Raton on April 24.

To Edward Sweeney (3426) on the death of his mother in Seattle, April 27.

NATO Groups Visit Sandia

Treaty verification technologies, a subject much in the news these days, was one of several topics covered in briefings when more than 100 members of two NATO (North Atlantic Treaty Organization) groups, most of them Europeans, visited Sandia April 23 and 24.

They also discussed — and learned about the latest advancements in — SDI programs and other Sandia programs of interest to the NATO alliance. The emphasis, naturally, was on the protection of nuclear weapons used to defend the NATO nations.

The two groups included representatives from 14 of the 16 NATO nations: Belgium, Canada, Denmark, Federal Republic of Germany, Greece, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Turkey, the United Kingdom, and the U.S.

Nuclear Security Systems Directorate 5200 and Management Staff 400 hosted briefings for the groups the morning of April 23; 5200 staged the afternoon tours and hosted the meeting on April 24 for the senior-level group (see below). Andy Lieber, manager of Survivability Systems Dept. 5220, coordinated those efforts, a follow-on to the similar task he performed during Aprilfest I two years ago.

One of the two groups, the High Level Group (HLG), is concerned primarily with political and policy issues. It is chaired by Richard Perle, Assistant Secretary of Defense for International Security Policy. Perle, who had accompanied Secretary of State George Shultz to Moscow for arms talks the previous week, was obviously involved in follow-ups to those talks and was unable to accompany the group to Albuquerque. Frank Gaffney, President Reagan's nominee to replace Perle (who plans to leave his post this spring), served as chairman of the HLG during the visit.

"As might be supposed, the HLG was somewhat preoccupied with the implications of a possible treaty banning INFs [intermediate-range nuclear forces] in Europe," reports Andy. "In fact, they left here for Washington rather than continue their planned itinerary. But their concerns with a possible INF treaty certainly focused their attention on Sandia's work in treaty verification technologies."

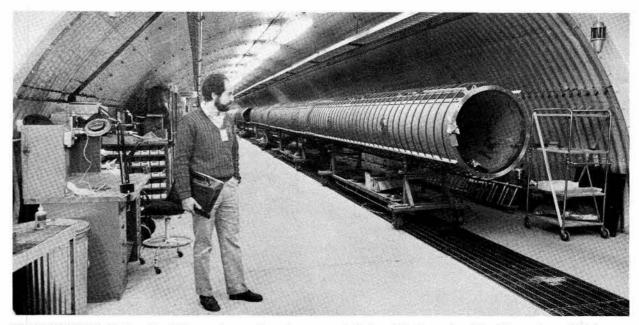
The second group, the Senior Level Weapon Protection Group (SLWPG), is headed by Bob Barker, a former LLNLer who is now Assistant to the Secretary of Defense for Atomic Energy and Staff Director of the new Nuclear Weapons Council. The SLWPG is concerned with technical and military issues and concentrates on means to ensure the safety and "survivability" (that is, frustrating enemy efforts to prevent the use of a weapon's use as and when intended) of nuclear weapons sited in the member nations.

"The SLWPG group members I've talked with have been most enthusiastic about what they've heard and seen at Sandia," said Barker. "There's a growing recognition that Sandia truly understands today's security and survivability technology. That capability makes the Labs a very important resource for us, especially as we move toward designing countermeasures to threats" (see also "SLWPG and Sandia").

"The HLG and SLWPG normally meet at NATO headquarters in Brussels," says Bill Myre (5200). "However, they try to schedule one meeting a year at various U.S. locations where the members can observe activities of particular interest to NATO.

"Visiting Albuquerque and Sandia twice in the last two years underlines their interest in the work we are doing that supports NATO's nuclear weapons posture," concludes Bill. "We are pleased and flattered by their visit."





FRANK GAFFNEY, President Reagan's nominee to succeed Richard Perle as Assistant Secretary of Defense for International Security Policy (and thus chairman of the High-Level Group), contemplated the DELPHI 100-metre experiment during a tour of Area IV. An SDI project, DELPHI permits the study of electron-beam propagation through an ion channel for midcourse discrimination. Addressing the NATO visitors to Sandia earlier, Gaffney called Sandia "a true national resource." In treaty verification, for example, there's "lots of lip service, but few deeds" except at Sandia. And verification is "of ultimate importance. I have a profound appreciation for Sandia."

SLWPG and Sandia: An Excellent Match

Sandia is playing a key role in ensuring the security and survivability of the nuclear weapons based in Western Europe, a fact once again highlighted by the recent NATO visit, says Bob Barker, Assistant to the Secretary of Defense for Atomic Energy. Barker is also Staff Director of the new Nuclear Weapons Council and heads NATO's Senior Level Weapon Protection Group (SLWPG).

"We have a good group of people," said Barker in a LAB NEWS interview. "The fact they are willing to come all the way from Europe to Albuquerque for the second time in two years shows, I think, their commitment to this whole mission. And I also think it's a recognition on their part of the important role that Sandia plays in the NATO defense effort."

What role does the SLWPG itself play? "It provides the critical forum at which representatives of the Ministries of Defense of the NATO alliance can meet and discuss the technologies that apply to nuclear weapon security," Barker responded. "It's the group that can build a consensus as to what kinds of approaches should be taken in weapon security and survivability."

And once a consensus has been reached? "It then provides the necessary impetus to get the NATO budgetary people to seriously consider the security and survivability measures agreed upon within the group," Barker explained. "Even though some measures are inexpensive, there's a psychological hurdle to get over; for example, you always have to convince the operational people—the ones who ensure that the weapons are ready to respond if necessary—that these measures will not interfere with their ability to do their job."

The operational task is certainly important, but no more so than the task of the SLWPG: "The security and survivability of nuclear weapons plays a very critical role in providing a credible deterrence for the geographical area that's NATO," Barker pointed out.

SLWPG's View of the Sandia Role

"When the SLWPG looks at the future and asks, 'What are the technological capabilities that a future threat may present?' then we look for answers in an institution that truly understands today's technology," said Barker. "That's San-

dia. Sandia is exceptionally well qualified to answer this kind of question."

It's not uncommon, of course, for a group—even one as technically oriented as the SLWPG—to become mesmerized by impressive techniques and technologies but then to become disillusioned when faced with the difficult task of implementing what it has seen. But such is not the case with the SLWPG, according to Barker: "Over the past five or six years, we've brought about some tremendous accomplishments in nuclear weapon storage."

For example? "The whole weapons access delay system, which grew out of the Forward Look study headed by Andy Lieber [5220]," responded Barker. "It's now very much more difficult for anybody to get into a nuclear weapons storage site and get away with anything."

"And now we're about to kick off a weapon storage vault system as well," added Army Col. Andy Johnson, Barker's Special Assistant for Security and Survivability. "Those are two most impressive technological solutions to a potentially severe problem.

"Then there's Sandia's work in taking technology originated elsewhere and turning it into something really usable," Johnson continued. "I'm talking about MILES [multiple integrated laser engagement system, a means to assess the sharpshooting skills of guards in realistic practice encounters]. MILES has spun off from DOE to NATO and serves as the standard for guard training. And it's been invaluable in training people how to do their jobs, how to protect a storage site."

And did the group see appropriate technologies during its visit? "Absolutely," replied Johnson.

"More than that," said Barker. "You see, we're not interested only in hardware solutions to our security and survivability problems. We're also interested in operational solutions — better procedures, creative use of existing manpower, for example. And Sandia recognizes that.

"So our visit demonstrates once again the excellent match we have here," concluded Barker. "That is, a match between Sandia and a group that is hungry for information, hungry for effective, lower cost ways of making weapons secure without threatening their deterrent capabilities."



MEMBERS OF NATO's High Level and Senior Level Weapon Protection Groups listen as Stan Fraley (9111) explains some of the technologies for verifying arms control treaties. The groups were touring a demonstration site that includes several facility-monitoring systems.



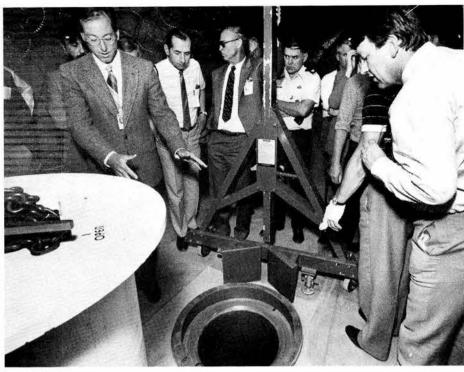
KEITH MATZEN (1273) explained to the NATO visitors how pulsed power accelerators can drive X-ray laser experiments. Here, he inserts a laser target holder into a diode.



HOW MILES WORKS was explained to the NATO groups by Larry Stotts (5215). MILES (multiple integrated laser engagement system) adapts to a variety of firearms and, thanks to the laser-signal-sensing vest Larry is discussing, allows protective forces to keep score; that is, they can assess their ability to protect nuclear weapons from being captured by an enemy.



HOW MILES WORKS was demonstrated to the NATO groups by Sandia's STOP (Special Tactical Operations Personnel) team. Adversary and protective teams, using MILES-equipped firearms, battled for control of a weapons storage igloo. Sandia played a key role in making MILES useful for realistic training battles.



"FLOORSAFE," demonstrated by Steve Scott (5257, left), is a major step in making a weapon inaccessible. A typical floorsafe would be located inside a storage igloo containing a variety of access denial systems. Steve's supervisor, John Kane, is center in dark glasses.







WITH AND WITHOUT AQUEOUS FOAM — In top photo, detonation of 100 pounds of high explosive inside a tent containing 30,000 cu. ft. of aqueous foam produced relatively small amount of smoke (along with water droplets and a piece of the tent) and did little damage to the van parked 30 feet away. Center photo shows effect of identical HE detonation; this one produced a greater volume of smoke — and totalled the van 30 feet away (see tire-kicking ceremony in bottom photo). Experiments like this one show that aqueous foam can attenuate blast effects and reduce the dispersal of any radioactive substance exposed to the detonation and spread along with the smoke. Such a capability would make the foam a useful tool for combatting nuclear terrorism.



ON THE ONE HAND, there's Mass 11, according to Sandy Hudson (7000); on the other, there's WordMARC. The dual word-processing standard is to be no more. The pros and cons of each software system are being tallied this month by the Office Automation Subcommittee (OAS) in its drive to reduce to one the number of word-processing packages required for secretaries.



RIGHT-HAND MACHINE for Larry Bertholf (2600) is the VAX — an intermediate system that secretaries will use during the transition from two "soft" standards to one "hard" standard for word processing. In a few months, VAXes such as this one will be able to translate files from the software system not chosen to the new software standard. "It's been difficult and inconvenient without a single standard," says Larry. "Now Labs offices will exchange data more easily."

Respite for Secretaries

One Standard for Word Processing: Just Around Corner

Last month secretary Sandy Hudson (7000) learned first-hand how difficult it is to switch suddenly, unaided, to an unfamiliar word-processing system (see "Set Single Standard" story).

But she wasn't unfamiliar with the problem — or a possible solution. She had already worked on a review of Labs-wide difficulties with multiple word-processing systems, on behalf of the *Ad Hoc* Committee on Word Processing (see "Four-Year Quest" story). Also, she had just begun chairing the Office Automation Subcommittee (OAS), newly chartered by President Welber.

By early June, the OAS will choose one, fixed standard for word-processing software for all 475 secretaries at SNLA. Small Staff will review the selection on June 16.

The software — not hardware — standard, once implemented, will be a major step toward reducing the inefficiencies and frustrations that stem from the recent proliferation of software systems. After all, Sandy's experience as a substitute is all too typical — just to cover vacation time this year, subs and 22 floaters are filling in for regular secretaries on one out of nine days (about 11,400 of 95,000 secretarial working days), for example.

Top Contenders

The standardization move has President Welber's full support — and Larry Bertholf's, who is coordinating the OAS as Director of Computing 2600. "We need a fixed, hard standard quickly," Larry says.

"We want to get on with implementing it as soon as possible."

"The only contenders are WordMARC and Mass 11," says Sandy. "The choice will be one of those two."

Both systems have been "soft" standards at Sandia for some time — 80 percent of the 4000 personal computer (PC) users are using one or the other. "We fostered them as soft standards — but they were too soft," says Larry. "So, in effect, there was no standard at all. Secretaries are still at the mercy of those who use other packages."

"In an abstract sense, it almost doesn't matter which one will be the new software standard," says Sandy, "as long as we adopt one and stick with it. Most of us agree that's the necessary — and, in the end, the easiest — thing to do."

The choice has not yet been made — and it's being considered carefully: OAS is taking most of April and May to weigh the strengths and weaknesses of each software system. There's the issue of sheer numbers — 1772 staff members and secretaries used WordMARC and 983 used Mass 11 as of January. But the choice is more than a popularity contest — each system has some unique features. And there's the matter of predicting the types of improvements the vendors will make in their updates over the next few years.

OAS is gathering feedback from line secretaries. And most of its members are also making personal comparisons: The 10 secretaries and the representative from computing are taking five halfday classes on Mass 11 and WordMARC and then using the systems at their workstations.

Most of the secretaries surveyed last year didn't consider either system very "user-friendly" — at least, compared to older systems that are no longer top contenders. However, both Mass 11 and Word-MARC have two features that are important to the technical environment at Sandia. First, each can run on either PCs (microcomputers) or the VAX system — a network of nearly 200 minicomputers that are used for scientific and engineering applications as well as for exchanging files among offices. Second, each can handle special characters for scientific equations (math symbols, Greek letters, etc.).

By Same Time, Next Year

"After Small Staff makes the final decision, we'll probably need six to 12 months to fully implement the standard," says Larry. "And I'm confident that it'll work."

The computer organization will use its resources to support the chosen standard for secretaries — and only the standard. Central support in this case means having software installed for existing hardware and getting help with system failures.

The changeover to a software standard is limited in scope: Sandia probably won't need to go to one standard for hardware — the machines themselves. "Many vendors support a variety of word-processing packages," says Larry. "And both Mass 11 and WordMARC can work on most of the hardware our secretaries already have."

Nevertheless, the standardization move requires three steps: purchasing extra copies of the chosen software, installing it, and scheduling in-hours training for those secretaries — and staff members — who will be switching over.

Translators for Transition

How do we get there from here? The year or so until the standard is firmly entrenched will be a time of transition — for ironing out kinks. "Although there's no universal solution, the computing organization will try to solve the bulk of any problems," says Larry.

There will be help with software, as suggested by many secretaries. "We'll provide translation packages between WordMARC and Mass 11 so that files and disks can be converted from one to the other system," says Mike Robles, supervisor of Office Systems Division 2613. These will allow secretaries to access their old files and reuse that data — whatever's been stored in non-standard format.

"Translators are being developed by two vendors, and should be available by the end of summer," says Mike. "Initially they'll run on the VAX. Later

(Continued on Next Page)

Frustrations First-Hand

Set Single Standard, Says Substitute Secretary

She's a Sandia vice-president's executive secretary, and when President Welber's secretary calls her in to substitute, she goes. "Secretaries are on call most of the time," she says. So she leaves behind her familiar IBM PC and her Multimate software (with some quick hints for her substitute).

Now her working tools for the week are a DEC Rainbow and its Mass 11 word-processing package. The only clue as to how the whole thing works is a short list of commands jotted down earlier in shorthand. The secretary and the system — monitor, printer, and their operating routines — have to function as a team, but they've never been formally introduced.

What if President Welber needs a letter quickly? She has to resort to a nearby electric typewriter. She gets the letter out — and then (whenever the phone stops ringing) tries to boot up the Rainbow and get into the Mass 11's letter file — just in case she'll have to do a form letter or continue a draft started before she came over. She'll learn in a few days how to use the system for some routine work — though she'll admit later she still doesn't really know how to use it efficiently.

"It's hard to work in someone else's shop when the tools are foreign," says the executive secretary, Sandy Hudson (7000). "All substitutes and floaters in Albuquerque have found that out — and some have had to alternate among all of the seven major word-processing packages currently in use at Sandia Albuquerque."

Often, Sandy notes, a substitute will tell a technical staff member, "I'll be back in a minute," and dash back to her home office to get a letter or chart done on time. Yet they all know—secretaries and staff alike—that ferrying papers or disks around that way is just a quick fix, not a long-term solution.

One Standard

we'll have versions that can run on IBM PCs."

And secretaries will have their own troubleshooter — a "computer guru" — at the Small Computer Support Center in Bldg. 880. "We'll hire a contractor — maybe two — to watch over the transition and answer questions," Mike says. "She or he won't make 'house calls' — but will be reachable through a hotline."

Support would also entail a special section in the "Sandia Computing Newsletter" on word-processing trials and tribulations. It would be written for — and by — secretaries.

Other OAS ideas are to have secretaries form users' groups, compile hints for a users' notebook, and — whenever vendors release software updates — participate in seminars on new word-processing features.

Working-Level Interface

What about compatibility between the standard and the Albuquerque staff? "We don't intend to dictate what staff members are to buy or use for their own work," says Larry. "At the same time, secretaries will now be in a position to say, 'For the word-processing work I do, there is a Labs-wide, single standard that I am to use." Secretaries won't be caught in the middle any longer — staffers may have their preferences, but secretaries will be supported and expected to use the single standard. Cooperation and acceptance by staff will be expected."

There are practical reasons for going along now with the standardization move. "Standardization has a high priority and will improve productivity in the long run," says Craig Jones (2610), chairman of the Office Systems Advisory Group (OSAG).

"We're emerging from the first phase of office automation at Sandia — the stand-alone mode," he explains. "And we're poised at the beginning of the next phase, Labs-wide information exchange. That means a common, high-tech environment for sharing data.

"Eventually we'll no longer use paper but rather electronic forms — for document reviews, mail, travel vouchers, equipment inventories, SLIs, purchase requisitions," he notes. "You'll need to be in sync with the communications system to use it." •ID

Running — One Sandian and one Sandia spouse were among the 6900 runners who qualified (and the 3000 "bandits" who dispensed with qualification niceties) for the Boston Marathon this year. Facing a 15 mph head wind, the group set few records: Derek Snyder (9011), for example, ended the race with a time of about 3:21; he'd qualified at 3:10. Bev Hueter (wife of Ken, 9115) also noted that the wind — and the humidity — cut her time. "But just participating was worth it," she reports. Derek agrees: "It was a super run, and both the race officials and the spectators were incredibly supportive."

Cycle Racing — Arroyos, jeep trails, cow paths, powerline "roads," and other delights await the trail bikers who compete in the 10th annual "Oh My God 100" desert race (off Highway 44 northwest of Bernalillo) on May 17. It's 100 miles for experts, 75 for over-40s and amateurs, 50 for women and novices. Entry fee is \$25 through May 12, \$30 thereafter. Call Dwight Lewis (DOE) on 296-7896 for entry forms.

Bowling — SANDOE Bowling Association February Bowler-of-the-Month winners were Ron Van Theemsche (2851), Men's Scratch, 689; Mary Griffin (DOE/FMD), Women's Scratch, 588; Daniel Baca (7813), Men's Handicap, 662; and Thelma Harrell, Women's Handicap, 649.

The March Bowler-of-the-Month winners were Reyes Chavez (7474), Men's Scratch, 622; Lil Radtke

Secretaries Involved More and More

Quest for Solution to Modern Babel

The machines and programs that have emerged to help handle the information explosion in the Age of Electronics both help and hinder office workers. That includes those at Sandia, particularly secretaries.

Multiple software systems are a good part of the hindrance.

Sandia offices in Albuquerque first went electronic in the late 1970s with two types of word processors. Then the first wave of a variety of PCs and word-processing software systems came in, starting four years ago. That's when many of Sandia's 475 secretaries — individuals whose day-to-day jobs involve the largest volume of word-processing — faced the challenge of mastering multiple software systems.

Sandia began to take a look at the problem that same year.

Surveys, Recs Piling Up

By September of 1983, a task group had held "town meetings" — with secretaries included among the participants — on forecasts of automated-office problems. Chaired by Art Arenholz (now 3710), the Office Automation and Management Information Systems (OA/MIS) group issued a SAND report on the results.

Secretarial supervisors Carol Kaemper (21-1) and Shirley Dean (22-2) surveyed all SNLA secretaries last April on word-processing problems and needs.

Later, Bob Peurifoy Jr., vice-president for Technical Support 7000, asked his executive secretary, Sandy Hudson, to survey Large Staff secretaries. A report came out last August.

More recently, at the request of President Welber, John Cantwell (20/30) formed an Ad Hoc Committee on Word Processing to review the matter. In February, the Committee published a comprehensive report (sent out to division supervisors last month) on its findings — with some recommendations. By the first week of April, President Welber signed a charter for the Office Automation Subcommittee (OAS). Its task: to recommend

"word processing, graphics, spread sheet, and other office automation standards for secretarial workstations."

The OAS consists mainly of secretaries representing each vice-presidency. As a group voice for secretaries, the OAS reports to the Office Systems Advisory Group (OSAG). The secretaries among OAS members are Sandy Hudson (7000), chairman; Connie Jackson (21-1); Mary Courtney (22-2, 100, 200, 400); Barbara Davis (1000); Pat Hamlet (2000); Sue Henderson (3000); D'Ann Anderson (5000); Edwina Nordberg (6000); and Becky Hunter (9000). Loraine McCutcheon (2613), Maureen Baca (3523), and Betty Worley (4000) represent the computing, training, and legal organizations.

Influence Growing

Choosing one word-processing standard (see "One Standard" story) is now the primary concern of the OAS. However, OAS coordinator Larry Bertholf (2600) sees OAS influence as growing over time. "It's probable that more tasks, such as suggesting hardware upgrades, will be added in time," he says.

"Our secretaries have become knowledgeable about word processing," he notes. "Some have used many systems. They've compared software packages and different types of hardware. Because they've tried several things, they can provide useful guidance on their preferences — and list reasons why."

"Management is listening now to what secretaries say about their problems," says Sandy. "That's good. We need cooperation if we're going to help secretaries be as efficient as they'd like to be.

"The question at the moment is the wordprocessing standard," she continues. "But the longer-term issue is one of ensuring secretarial productivity through the use of office-automation tools, something that's critically important to all —secretaries, the staff, and Sandia."

Fun & Games

(3430), Women's Scratch, 557; Albert Sanchez, Men's Handicap, 668; and Lin Ohrt, Women's Handicap, 646.

Winners of the Scotch Doubles tournament held at Fiesta Lanes on April 11-12 were Ellen Smarge (1822) and James Cordova (7412) with a 1264 combined handicap series. Second place went to guests Steve and Stephanie Guerra with a 1239 combined handicap series. This was the last tournament of the 1986-87 season.

Archery — The Manzano Archery Club is hosting an archery shoot featuring 28 animal targets and novelty shoots tomorrow at the Kirtland Archery Range. Registration is from 8 to 9 a.m.; fees are \$5/adult, \$2.50/youth under 14. The public is invited. Membership applications will be available. For more information, contact Dewey Reed on 4-4558 or 265-2687.

Camping — If you're looking for that slightly unusual vacation this summer, or your older teenagers need something to do, consider spending a few weeks camping out at the expense of the Forest Service and Volunteers for the Outdoors. They are looking for volunteers who will camp out in the Pecos Wilderness for a four-week period and act as "wilderness hosts," to visit with other campers and tell them about the need to treat the wilderness with tender loving care. They'll also do light trail maintenance and perform any necessary first aid. Two

four-week periods are available, June 26 to July 26 and July 30 to Aug. 30. Training will be provided. Applicants should be 18 or older and in good physical condition. Backpacking experience is required. If you're interested, call Tom Goettsche at 298-0232.

Golf — Three Sandia Golf Association tournaments are coming up in May: The Rail Classic — Two-man Best Ball on May 9 at Tierra Del Sol in Belen; Two-man Blind Draw at Paradise Hills on May 15; and the Southern Classic at New Mexico Tech in Socorro on May 23. Anyone interested in joining SGA should contact Dan Buller (1111) on 4-7039 or any SGA member.

Bowling Averages in Your Spare Time



If you think bowling a perfect score of 300 is hard, try figuring out how many different ways a bowler can roll, say, a 147, or for that matter, any other score . . .

Now the numbers are known, courtesy of mathematicians Curtis N. Cooper and Robert E. Kennedy of Central Missouri State University. Out of 5.7 billion billion possible games, the striking results show that there are more ways to bowl a 77 than any other score. That score comes up 172,542,309,343,731,946 times. In contrast, there are only 51,701,385,089,887 ways to bowl a 147, merely 1,526,313,637 ways to reach 200, and of course, only one way to score a 300. When all possible scores are added together and then divided by the total number of possible games, the mean score comes to an "awful" 80.

"This won't help you bowl any better," says Cooper, "but it may make you feel better about your own score."

Science News



THESE WARM-UP EXERCISERS at last year's Fitness Day inadvertently provided a preview of one of the main events at this year's Fitness Day. Kate Brennan (3330) and helpers will show you how important stretching is as well as show you how to do it right — and you can join the stretchers. The seventh annual Fitness Day begins May 15 at noon.



LIKE FITNESS DAY LAST YEAR, this year's edition will include a 1.5-mile fun run/walk through the scenic wonder that is KAFB housing; bikers can do a 3-mile fun pedal. All the bikers and joggers (and walkers, unless pathetically poky) become eligible for the prize drawing later. And they won't miss the featured attractions: the UNM gymnastic team and the stretching demonstration.

Put Fitness in Your Future

Fitness Day 87 Next Friday

Come out for the seventh annual Fitness Day next Friday, May 15, at the Parade Ground. It's a great way to spend the lunch hour. You'll have an opportunity to:

- see a show by the acclaimed UNM men's gymnastic team;
- watch and participate in a stretching demonstration led by Kate Brennan (3330), assisted by Dave Bushmire (2157) and Pam Raubinger (YWCA);
- eat lunch; pita sandwiches are \$2 (or bring your brown bag), juice and water are free;
- join in a 3-mile bike ride or a 1-1/2-mile walk or jog;
- or listen to some great music by Denny Gallegos (3743) while the joggers and bikers do their Base tour;
- and generally get inspired to shuck your sedentary life style and join the "fitness is fun" folk.

Need an incentive to wear your tennies to work that day and join the joggers/walkers/bikers? Finishers get tickets good for a drawing. Top prize is a 10-speed bike. There's more — SERP will provide a free windsurfing class or four lunches for two at the Coronado Club, and several TLC T-shirts will be given away.

On the inspirational front, Fitness Day 87 will include tables where you can get information about — or sign up for — Get Fit New Mexico (see box), SERP, NM Walkers and Striders, Jazzworks, Waist Basket, and the YMCA (the latter three aerobically oriented).

Dr. Larry Clevenger (3300) will serve as MC for the event, which is sponsored by the Sandia TLC Support Committee (nee Friends of Health) headed by Susan Harris (3330). And all Sandians, DOEans, and KAFBers (and their spouses, dependents, and retirees) are invited.

Retiree Picnic Set

Sandia retirees, their spouses, and surviving spouses of retirees are invited to the Annual Picnic May 21 from 4 to 7 p.m. at the Coronado Club.

In addition to refreshments, entertainment will be provided by the Bob Banks Trio; a special show will be presented at 6. Videotapes of last year's picnic will run from 5 to 6, and videotapes of this year's gathering will run after 6.

Members of Large Staff will be on hand to meet with attendees. Sandia's retirees and surviving spouses now number more than 3500 people spread among 38 states and 2 foreign countries.

Parking: Use the Coronado Club, the Chapel, the Que Pasa Recreation Center, the Base Hospital, or the Sandia Base Elementary School parking areas. (A shuttle bus will run between the Club and the parking areas on "B" street.) Avoid parking in residential areas. Handicapped parking is at the Club's front entrance.

HealthNet NM Campaign #2

Sign Up for Get Fit New Mexico

HealthNet New Mexico's next campaign, Get Fit NM, will kick off with signups during Fitness Day 87. A sequel to HealthNet's Eat Right campaign last winter, the 10-week Get Fit program aims to convert non-exercisers and sporadic exercisers into regular (half-an-hour thrice-a-week) types

Your \$5 fee at the Get Fit table gets you a T-shirt and a Get Fit kit, developed by Stanford University, that shows you how to remove excuses for not exercising regularly and how to calculate your current and target pulse rate; the kit also includes an exercise log, which you'll keep to

show your progress toward regular exercising. The kit pushes walking, but biking, swimming, jogging, etc. are also promoted.

If you stay with the program for 10 weeks, you'll receive a pin for your T-shirt and you'll be eligible for prizes via a local drawing. You'll also qualify for the grand prize among all the Get Fitters in the state — a trip for two to San Diego.

Want to sign up but can't make it to Fitness Day? Then come by Bldg. T-13 (south of Medical) from 7:45 to 9:45 a.m. on May 21 or 22. Or register at any sporting goods store or health/fitness club

For Your Benefit

Dental Claim Problems? Get to Work Early

Metropolitan, the administrator of Sandia's Dental Expense Plan, is now taking calls from 7:30 a.m. until 4:30 p.m. (MDT), Monday through Friday. Peak telephone traffic is between 11 a.m. and 2 p.m., so try to avoid calling then. Call Metropolitan at 1-800-221-9677 if you have questions about payment of dental claims.

Name Change

Transamerica Occidental Life Insurance Company has merged and changed its name to Provident Life and Accident Insurance Company. The Sandia Medical Care Plan and benefits are unchanged.

INSTEAD OF GROUP TOURS, participants in Sandia's annual Science Youth Day on April 27 were assigned either singly or in groups of two to "shadow" Labs scientists and engineers to learn more about their jobs. Here, Lori Maestas (1822, right) points out integrated circuit display generated by electron microscope to Melinda Perkins (Albuquerque High School, left) and Karol Holmes (West Mesa High School). "The students — and their teachers — were enthusiastic about the individualized approach," says Science Youth Day coordinator Bob Austin (3163). "They had a better opportunity to ask questions and to find out what it's really like in the world of science."

Take Note

Jim Corey (4030) was recently elected chairman of the Enchantment Chapter of the National Classification Management Society, a professional society for people working in the fields of security classification, information security, and technology security.

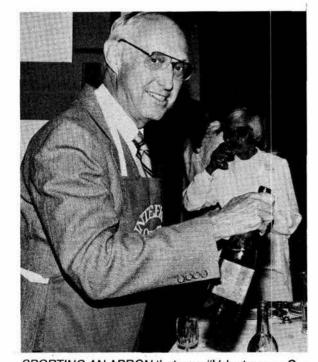
Harry Saxton (2500) participated in the opening panel discussion, "Technology Along the Rio Grande," of the ninth annual Ideas in Science and Electronics Exposition and Symposium (ISE '87) at the Albuquerque Convention Center this week. The Albuquerque Section of IEEE sponsored the program.

Pat Baca (3438) won first place in the Youth Community Service Award competition this year for her work with Albuquerque's problem youth. She earned the award from Youth Development, Inc. (a United Way agency), for sponsoring several child-related bills in the legislature and for gaining community support for the new Chronic Runaway Facility; several Sandians responded to Pat's plea in the LAB NEWS for furniture for the facility.

Corry McDonald (ret.) will sign copies of his book, *The Dilemma of Wilderness* (see LAB NEWS, March 13, 1987), on May 16 from 2 to 5 p.m. at Book Fare, 5901 Wyoming NE (Wyoming & Academy). Refreshments too, according to Corry.

The annual installation dinner meeting of the Albuquerque section of the American Institute of Aeronautics & Astronautics will be held May 15 in Santa Fe. William Ward will speak on the Pioneer and Voyager missions to Jupiter, Saturn, Uranus, and beyond. Cost is \$15/members, \$20/non-members, and \$10/students and children. Limited rider space is available in vans at a cost of \$3/person round trip. Reservations must be made before May 12. Contact Greg Homicz (1556) on 4-9065 for more information.

The UNM Division of General Medicine is presenting a series of free talks on current health issues by physicians from the Dept. of Medicine. The monthly sessions are held from 6 to 7 p.m. in Classroom 4 behind the UNM Hospital cafeteria (enter through the main entrance, directions provided). The next talk — on arthritis — will be May 21. Other topics: AIDS, heart disease, thyroid disease, high blood pressure, and osteoporosis. For more information, contact the UNM Division of General Medicine at 843-2147.



SPORTING AN APRON that says "Volunteers — Our Greatest Natural Resource," President Irwin Welber poured wine samples at a party honoring VIA participants on April 28. A good turnout enjoyed the sampling session, and a few lucky attendees took home door prizes donated by various community organizations, reports VIA administrator Karen Shane (3163).



KARATE EXPERT ERIC LAMB (3154) chalked up another big win at the Southwest Karate Grand Championships, held recently in Albuquerque. For the third year in a row, he took the top prize: Black Belt Fighting Grand Champion. Here, Eric (left), aka "The Fighting Lion," fends off "Big John" with a lower arm cover during the championship match.

The American Lung Association of New Mexico is sponsoring the Stephen Lopez Memorial Camp for Asthmatic Youth June 14-20. Stephen Lopez died in a bicycle accident while raising funds for Lung Association programs. The seven-day camp emphasizes activities geared to asthmatic children and teens (ages 9 to 16) including swimming, fishing, hiking, horseback riding, team sports, archery, and arts and crafts as well as classes on asthma and how to deal with it. Twenty-four-hour, on-site medical care is provided. For more information, contact the Lung Association on 265-0732.

The New Mexico Museum of Natural History is looking for volunteers with stars in their eyes. Training sessions will be held May 19-21 at 7:30 p.m. to instruct interested individuals in operation of the Planetarium and about stars, constellations, and Greco-Roman history related to stars. For more information and to register, call Vic Brown on 888-9656.

Girls entering third grade and above (whether or not they are registered Girl Scouts) are invited to share a special summer experience at Rancho del Chaparral Girl Scout Camp located in the Jemez Mountains. The camp is at an altitude of 8000 feet in the Santa Fe National Forest. A mountain stream flows through the camp. Activities include horseback riding, arts and nature crafts, hiking, archery, burro trekking, cookouts, campfires, and sessions for girls with special interests. Camp sessions run 7 to 14 days and cost \$105 and up. For more information, contact the Chaparral Girl Scout Council at 243-9581.

The New Mexico Museum of Natural History's Summer Science Camp opens June 15. Led by experienced naturalists, campers will explore the natural environments of the Albuquerque area from the Sandias to the volcanos. Activities include wildlife and plant studies, rock and fossil hunting, and outdoor games. Ten sessions are offered, each lasting one week. Enrollment is limited to 13 students per session. Cost is \$130 (Museum Foundation members \$120). For more information, call Tish Morris on 841-8837.

The Sanado Woman's Club monthly meeting is at the Classic Ramada on May 12. George Pulakos, CPA, will speak at 1 p.m. on the new tax laws. Members' husbands are invited. Lunch begins at noon and is \$8.75. Make reservations with Marsha at 296-3064. Sanado will not meet during June, July, or August.

* * *

The League of United Latin American Citizens (LULAC) 58th State Convention is May 14-17 at the Ramada Classic Hotel. Guest speakers include EEO



THREE-YEAR-OLD ERIC JR. was all eyes when his dad (Eric Lamb, 3154) won the six-ft.-high Grand Champion trophy at the Southwest Karate Grand Championships. Karate champs from five states — New Mexico, Colorado, Texas, Arizona, and California — competed in the event.

Commissioner Alfred Alvarez; UNM Vice President for Academic Affairs Chris Garcia; and NM Secretary of State Rebecca Vigil. For more information, call Connie Martinez on 4-1861.

LAB NEWS (Bldg. 814) has 300 free passes to an advance screening of "Harry and the Hendersons," a PG-rated movie produced by Steven Spielberg's company; passes are available to Sandians on an as-long-as-they-last basis. The movie depicts a typical American family on a camping trip interrupted by the arrival of Harry, a sort of friendly Bigfoot. Screening is May 19 at 7 p.m. at Cinema East.

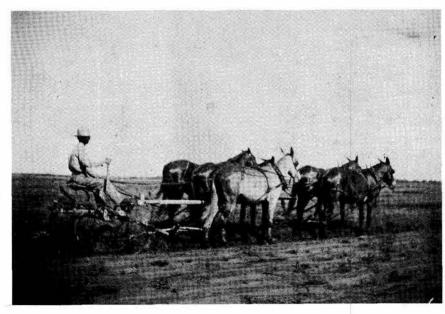
Retiring and not shown in LAB NEWS photos: Larry Harrah (9110), Hank Lauson (2643), and Marie Arellanes (3731).



I CAME to Sandia in 1948, and after the Coronado Club was completed in 1950, I organized a bowling team in Purchasing. We competed against other Labs teams on the two lanes in the basement of the Club. It must have been in 1951 or 52 that our team took first place. This photo shows President George Landry formally presenting me with the trophy. Behind me are [from left] Bill Dietrich, Director of Purchasing; Bob Findlay, a department manager in the Shops and a key figure in the recreation program; and Jim McGovern, then with the AEC Area Office and later a department manager in Purchasing.

— Al Dadian (retired and since deceased)

Favorite Old Photos



WHEN THE AREA of southwest Oklahoma known as the Big Pasture was opened for settlement, my grandfather, G. W. Randall, and his family homesteaded on 160 acres of it. In 1907 my grandmother took this picture of him breaking the sod for their first crop. Obviously, grandpa had mustered all the horsepower he could harness. His greatgrandson still farms the same land, but with vastly different equipment.

- Bob Randall (ret.)



THIS IS NOT AN OLD PHOTO — but it's sure an old bike. You see, Sandia Livermore has a bevy of bicycles for employees to use in traveling from one part of its comparatively small security area to another. The larger world that is Sandia Albuquerque, however, has provided no such convenient transportation since about 1970. When I complained of the rank injustice being perpetrated on us SNLA folk, Ward Hunnicutt (7800) graciously provided this splendid machine for use by Labs employees. Strangely enough, it's not getting much use. In fact, it's been parked east of Bldg. T-16 (north of 802) for some time. Can't understand why.

—Bruce Hawkinson (3162)

Death



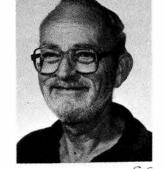
Floyd Hursh of Engineering Procedures, Specifications, and Support Division 2833 died March 29 after a lengthy illness. He was 63 years old.

Floyd had been a member of the Labs staff since November 1955.

He is survived by his wife, son, and daughter.

Retiring





Lew Faw (7253)

Lloyd Sandgren (7124) 30 yrs.

Welcome

Albuquerque

Donald Bridgers (3311)

Gene Kallenbach (9233)

30 yrs.

California

Victor Harper-Slaboszewicz (1231)

Creve Maples (1413)

Ohio

Jeffery Gallant (7256)

Tennessee

Melissa Wilson (5253)

Texa:

Tommy Goolsby (7531)

Stephen Lee (2564)

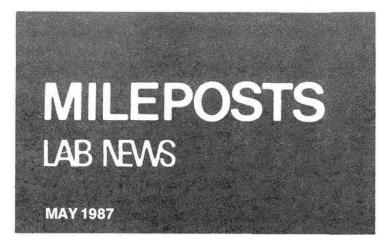
Utah

William Greenwood (2545) George Sloan (2342)

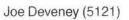
Bond Drive Kicks Off May 25



BUY U.S. SAVINGS BONDS THROUGH THE PAYROLL SAVINGS PLAN!









Gerald Hastings (2833) 30



Jim McClure (6321)





Jeanne Holmes (3531)



Phil Vouterin (3426)



Bob Reed (5129)

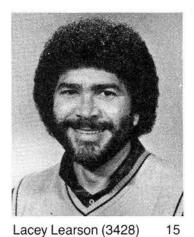
30



Bob Neel (DMTS, 5234) 30



Karl Schuler (DMTS, 1522)20



Lacey Learson (3428)



Damian Gutierrez (3423) 10



Brian Crowley (2629)



Ed Roberts (5256)



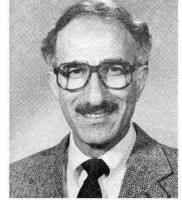
Joe Ashcraft (9211)



Betty Worley (4000)



Ken Peters (7471)



George Samara (1130)



Bud Watkins (7121)



25



Jim Holmes (5233)



Billy Stanton (5146)



Glen Fowler (5213)

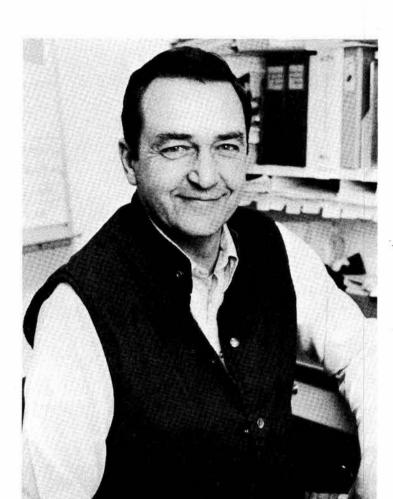


20

Stan Roeske (2322)

25





10

John Moore (5121)



Clarence Huddle (1245) 30



Vern Barr (8464)

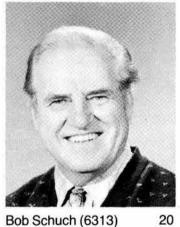


Marion Apodaca (7556) 25



Don Osbourn (8442)

20



Bob Schuch (6313)

20



John Bentz (7537)



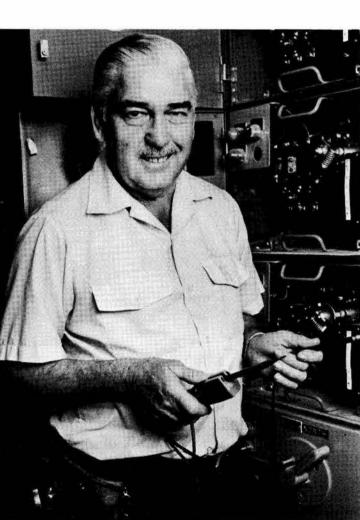
Johnny Ulibarri (9141)



Jim Muir (8464)

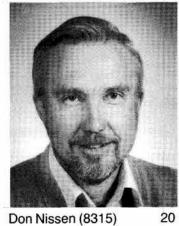


Lois Myers (3141)

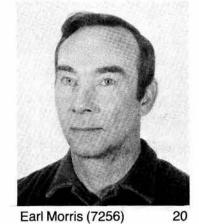




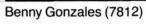
Tony Torres (3413)



Don Nissen (8315)



Earl Morris (7256)



30

Don't Forget Fitness Day Next Friday —See Page Fourteen

UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS

Deadline: Friday noon before week of publication unless changed by holiday. Mail to Div. 3162.

Ad Rules

- 1. Limit 20 words, including last name and home phone.
- Include organization and full name with each ad submission
- Submit each ad in writing. No phone-ins
- Use 81/2 by 11-inch paper.
- Use separate sheet for each ad category
- Type or print ads legibly; use only accepted abbreviations.
- One ad per category per issue.
- No more than two insertions of
- No "For Rent" ads except for employees on temporary assignment. No commercial ads.
- For active and retired Sandians and DOE employees.
- Housing listed for sale is available for occupancy without regard to race, creed, color, or national origin.

MISCELLANEOUS

- BEIGE DRAPES, 2 pairs, w/decorative rods, fit windows 36" x 92", \$40; solid oak rocker, \$100. Dunlap, 884-
- EXERCYCLE, \$30; Greco baby swing, \$15; Greco baby swing w/bassinet, \$20; infant car seat carrier, \$23. Barnette, 292-5186.
- MICROWAVE, Toshiba, 1 cu. ft., \$125; Bell & Howell movie projector, screen camera, \$125; single bed headboard & frame, \$25; 2 bar stools, \$20/ea. Carlin, 292-5428 after 4:30.
- SWING SET: 2 swings, slide, 2-seat glider, trapeze, sky scooter, \$35. Halbleib, 296-2682.
- TIRES: sizes 13, 14, 15; power steering pump for '74 Maverick; '60 Ford 1/2-ton for parts, \$65. Padilla, 877-
- LAMPS: 2 solid brass, 35" tall, 3-way sockets, cost \$130 at Dillard's, ask ing \$69/both. Barr, 821-5870.
- S&W MOD 25-5, 45 Long Colt, presentation case, 300 rounds of ammo, empty cases, reloading dies, \$375/ set, will consider separately. Guthrie, 299-7182
- AIRLINE TICKET, one-way to Denver, must use on May 20, \$20. Marchi. 291-9681
- SPRINGER SPANIEL, black & white, not spayed, all shots, 1 yr. old, house-broken, trained, \$100 OBO. Koehler, 262-1882 or 291-0558
- CAMPER SHELL for long-bed minipickup, \$75 OBO. Vanderburg, 836-
- LAWN MOWER, 21" rotary, 1.5 hp, Craftsman Eager 1, used 2 seasons, \$150. Blankenship, 281-2257
- COBRA TELEPHONE ANSWERING MACHINE, \$40; Uniden cordless telephone, \$40. Koontz, 892-8437.
- JACKMAN WHEELS with four P/215/ 75R15 WSW tires, mounted, \$40 complete. O'Bryant, 268-9049.
- TRS-80 COMPUTER, 64K, needs work \$50; Percom disk drive, \$25; Epson MX80 printer, \$75; monitor, \$40; programs. Goodwin, 294-6702
- COMPAC COLOR FILM DEVELOPER, good for parts, \$45; twin mattress, box spring, frame, \$30; twin/full metal bed frame. Ottinger, 296-3526.
- GOLD VELVET SOFA, Lawson-style, \$175; B&W TV, 5", AC/DC battery, \$50; folding screen, 63"H, 72"W, \$30. Rainhart, 821-3690.
- RIFLES: 30-06, .243, scoped, w/slings and recoil pads; .22-cal. semi-auto.
- Tessler, 296-7587. ELECTRIC MOTOR, 2 hp, 110/220,
- never used, \$100. Montry, 821-3758. CONSTRUCTION LEFTOVERS (new in boxes): 600 sq. ft. brown ceramic floor tile, \$250; sliding-glass tub
- enclosure, \$50. Hall, 898-3363. ELECTRONIC ORGAN, Silvertone, double keyboard (3-1/2 octaves ea.), 21 manual pitch controls, bench (needs

- fixing), \$50 OBO. Hoven, 281-4114. RESHWATER AQUARIUM: 70-gal., complete w/plants, 70 + fish (assorted tetras), solid oak eye-level stand, support equipment, \$395. Schaub, 265-0004 evenings.
- LAWN MCWER, 21" Murray rear-bagger, \$125; 25" GE console TV, color, \$225. Subramanian, 921-1705 before 9
- TELESCOPE: 8" Cassegrain, several objectives plus camera adapter, equatorial mount w/motor drive, \$550. Dawson, 243-6829.
- BABY BED w/Simmons mattress, white, spindle-type, \$125 firm. Coe, 266-
- CERAMIC FLOOR TILES, raisin color (light brown), one box covers 10 sq. ft., 4 boxes at \$18/box. Hamilton, 294-5850
- TWO SOFAS: light cream color, \$450; blue-green color, \$250. Bland, 255-7026
- ENGINE BLOCK, '46, 6-cyl., flathead; rear axle w/differential; rear window for '76-'83 GM pickup, not sliding, best offer. Blaine, 883-1439.
- SOFA w/matching chair, \$65 OBO. Heifetz, 275-2648 before 9:30 p.m.
- TYPEWRITER, Remington, office, electric, \$70. Horton, 883-7504.
- FIRST COMMUNION dress, size 6-7. Wagner, 293-3211
- PRIMO OCTAGON SPA, 225-gal. capacity, adjustable hydrotherapy jets, temperature control, built-in thermometer and light, \$2100 OBO. Dyer, 298-5158.
- PUNCH BOWL, gold carnival glass, 12 cups, ladle, and hooks, \$35. Bazar, 898-1467.
- BOUDOIR LAMPS, pair, parchment shades, \$20; platform rocker, \$40; bed rest, brown, with side pockets, \$15. Easton, 256-7717.
- ELECTRIC GUITARS: Fender Strato-G-2U w/case, less than 2 yrs. old, \$300. Tipton, 298-1944.
- MW GARBAGE DISPOSAL, \$50; sofa, gold velour, \$70; recliner, green vinyl, \$40. Torres, 299-5789.
- END TABLES, coffee table, bookcase, \$150. Williams, 268-9757
- ANTIQUE FIREPLACE SCREEN w/ folding glass doors, 46-5/8" x 29", fits over 42" x 27" FP opening, \$40. Boeck, 298-6495.
- KITCHEN CABINETS, dishwasher, electric double oven, Corning-glass range. Van Deusen, 291-8196
- COMPUTER KEYBOARD, \$50; Cerwin-Vega Interface-C Series-3 speakers, \$350/ea.; bedroom set: headboard, 9-drawer dresser, 5drawer dresser, \$300. Levan, 821-
- CARPETING, 200 + sq. yds., gold/reddish, \$2/yd.; drapes and rods for 8 rooms. Lieberman, 299-7739.
- TYPEWRITER, portable, electric, Brother, \$100 OBO. Harrison, 255-7978. JAYCO POP-UP TRAILER, 1976 Jay-
- eagle, sleeps 8, icebox, 3-burner stove, Port-a-Potti, more, \$1800. Benham, 881-2593.
- ORGAN, Gulbransen model D, 2 manuals plus full pedals, 34 stops, and 2 Leslies, \$500; Black & Decker electric lawn mower, w/catcher, \$40. Reiff, 281-1192
- WOOD FOLDING DOOR, 4" slats, 40"W, \$10; skylights, 20" x 20", \$10; 24" x 48" frame, \$5. Atkins, 298-5762.
- ACCORDION, 120 bass, \$60; desk, 42" 181 SUZUKI 450T, 10K miles, adultx 18", 3-drawer, \$25. Westman, 255-
- ROWING MACHINE, Sears Lifestyler 1000, \$199 new, asking \$99. Bando, 292-2452.
- CAMPER SHELL, LWB, older model, free. Maxam, 898-2435. BLACK LAB PUP, 3 months old, free;
- bumper mount racks for small motorcycle, free. Hesch, 892-2105. PIECE RATTAN DINETTE SET,
- smoked glass, brass legs, \$195; sofa and loveseat, brown, \$200. Hinrichs, 299-0897.
- COLOR TV, 23" Zenith, color out of balance, w/cart, \$25. Beard, 821-0309.

- PARTS FROM '76 FORD PINTO, 4-cyl., '54 FORD CUSTOMLINER, 4-dr., \$1875; 4-spd., AC. Portillos, 345-4217.
- OOL TABLE, furniture, aquariums, baby items, misc., multi-family garage sale in Rio Rancho, May 9 & 10, follow signs to 637 Madeira, off Southern. Pilson, 892-9425.
- CAMPING TRAILER, '73 Starcraft Galsleeps 6. Ney, 298-6329.
- AIR CONDITIONER, refrigerated air, '81 CHEV. CITATION, one owner, 39K Sears, 15,000 BTU, \$250. Bauer, 266-8480
- spayed, pure-bred female, 2 yrs. old, free to good home. Freeman, 296-
- STEEL-SASH WINDOWS, \$10/ea.; fireplace screen and tools; skittle pool. Gonzales, 344-4933.
- HASSELBLAD 500cm w/80mm lens, waist-level finder, A12 magazine, Hasselblad filters, and strap; heavyduty weight bench. Montoya, 296-4268
- GE ELECTRIC STOVE, 40" wide, 2 ovens & broilers, rotisserie, oven thermometer; cartop carrier, collapsible, 36" x 48" x 15", steel frame, heavy-duty vinyl cover, \$25. Mills,
- HALF-OWNERSHIP SAILBOAT, Hobie Cat, all accessories and storage provided, \$1180 OBO; Monitor speakers, 200-watt, 12" Gauss, 60-watt horn, 3 for \$450. Pregent, 281-1414.

TRANSPORTATION

- '82 PONTIAC TRANS AM, all power, T-tops, 31K miles, \$6700. Collins,
- '84 HONDA CRX 1.5, 5-spd., AC, AM/ '81 HONDA CX500D, 13K miles, fair-FM cassette, alloy wheels, 36K miles, dealer-serviced, \$5500. Moody, 294-0482 after 5
- caster w/case, \$225; Washburn 3-SPD. BICYCLES: men's 26", women's '84 BMW 318i, 2-dr., 5-spd., AC, AM/ 24", \$45/ea. Diegle, 294-5565.
 - '73 CHEV. PICKUP, rebuilt 350 engine, small block, AT, AC, new brakes & shocks, tool box, carburetor problem, best offer. Konopka, 275-0960
 - '79 DATSUN TRUCK, 4-spd., regular gas, 77K miles. Williams, 293-7260. '83 MAZDA RX-7, \$7500 OBO. Le-
 - Master, 877-7202 evenings. '83 SUBARU SW, cruise, AC, AT, power windows, new tires, \$4950. Lack-
 - ey, 869-9333. '68 DODGE DART, 318 engine, transmission needs work. Gabaldon, 266-
 - 0028 '64-1/2 FORD MUSTANG, 260 V-8, PS, PB, AC, AT, R&H, \$3500. Ferguson,
 - 266-4769 '84 HONDA GOLDWING, 13K miles. garaged, burgundy paint. Schaub,
 - 265-0004 '86 FORD ESCORT, 2-dr., AC, rear defroster, metallic gray, \$5900 OBO.
 - Arguello, 293-9604. '86 FORD F-150, 1K miles, 6-cyl., 4spd., LWB, PS, PB, AC, \$8500.
 - Padilla, 842-8068. BICYCLE, men's, 26", Sears Free Spirit, 10-spd., w/back fender baskets,
 - \$40. Monahan, 892-1476 after 6. '83 HONDA CM250 street cycle, belt '79 BUICK ELECTRA, 59.7K miles, drive, trunk, 75 mpg, \$700. Holmes,
 - 292-0898 '75 CHEV. 1/2-TON, 4-spd., locking differential, AC, tilt, new 350 V-8, clutch, and tires, extras. Arana, 299-1214.
 - ridden, garaged, windscreen, \$795. Hueter, 299-7263.
 - '79 DATSUN SW, 4-dr., below book. Vogel, 256-1304 after 5:30. '77 MONTE CARLO, 60K miles, AM/FM
 - cassette, PS, PB, PW, AC, \$2250. Gough, 822-0090.
 - and interior work, \$1800 OBO. Roscoe. 884-4151 or 344-8767. 79 MERCURY CAPRI, sunroof, Mich-
 - elin tires. AT, AC, PS, new battery, brake job, and tune-up, \$2100. Maloney, 821-6661
 - HONDA ATC 185S 3-wheeler \$795 OBO. Martin, 897-7660.

- MGA parts: tranny, block, misc. Schaub, 821-7242 evenings and weekends.
- '861/2 NISSAN KC SE, 4-WD, burgundy, hard body, V-6, 5-spd., 10.5K miles, 5-yr./60K mile warranty, \$10,500. Torres, 242-9757.
- axy 6, furnace, refrigerator, stove, '83 SUBARU SW, stereo, cruise, AC, AT, new tires, \$4950. Lackey, 898-6638.
- 4-cyl., \$1975. Laney, 881-1703. GERMAN SHORTHAIRED POINTER, '83 NISSAN PULSAR NX, 5-spd., AC, sunroof, AM/FM, 45.7K miles, one owner, records, book value \$4200,

miles, AC, AT, PB, 4-dr., hatchback.

- asking \$3800. Esterly, 296-9759. '81 YAMAHA SECA 550, \$850. Holt,
- 294-6928. YAMAHA VIRAGO, 750cc, 6.2K miles, shaft drive, header pipes, \$1500. Boeck, 298-1012.
- '86 FORD F-150 PICKUP, LWB, 6-cyl., AT, AC, PS, PB, AM/FM cassette, auxiliary tank, \$10,500. Malone, 292-7760.
- '70 CHEV. NOVA, new tires, needs some work, \$700 OBO. Reed, 821-6315 after 5:30.
- '81 MacGREGOR SAILBOAT, 22', sleeps 5, 7.5 Honda, extras, \$6000 OBO. Brewer, 296-8204
- 76 PONTIAC ASTRE, 2-dr., hatchback, AC, 5-spd. overdrive, AM/FM stereo,
- \$700. Thornhill, 294-7581 '82 BERLINETTA CAMARO, loaded, \$6000. Weber, 268-0344.
- '80 PONTIAC SUNBIRD, rear window louvers, aluminum alloy wheels, 54K miles, \$1500. Weaver, 255-2385. MEN'S BICYCLE, 25" frame, 10-spd.,
- Facet Biotour 2000, \$100. Smith, 293-0216
- ing, crash bars, luggage rack, backrest, helmets, manual, extras, \$1000 Zirzow, 294-7296.
- FM cassette, sunroof, 26K miles,
- \$11,900. Spalding, 299-3376. HONDA CVCC SW, 67K miles, \$500. Maenchen, 298-9496.
- HONDA GL500I SILVERWING, black, AM/FM cassette, 14K miles, extras, \$1500 OBO. Biesterveld, 255-7415
- '75 CHEVELLE, 4-dr., 90K miles, fully equipped including dump truck bed. Williams, 298-2624
- '82 VW JETTA, diesel, 40 mpg/city, PS, PB, AC, AM/FM cassette, radials,
- \$3200. Petersen, 298-8914. '78 CORVETTE PACE CAR, L-82, 4spd., \$8200; '68 Corvette convertible, both tops, 327, 4-spd., \$9500.
- Meeks. 255-6142 12-SPD. BICYCLE, Nishiki International, 25" frame, \$225. Konkel, 299-5108
- 73 MGB CONVERTIBLE, new top and upholstery, best offer over \$2000. Melvin, 298-6402.
- '86 SUZUKI SAMURAI JX 4x4 convertible, 5-spd., AM/FM cassette, deluxe package, 3K miles, \$7300. Clark,
- '80 HONDA CIVIC SW, trade for pickup truck of comparable value. Hesch,
- 4-dr., all power, new tires, one owner, \$2700. Campo, 299-2570.
- '76 FORD F-250 PICKUP; 360 CID; heavy-duty rear axle, springs, tires, and bumpers; LWB, extras, \$1900. Andersen, 294-8624.
- '86 CHEV. CAVALIER CL, 4-dr., loaded, 15K miles, \$6800. Pastorek, 292-6323
- '84 SPORTCOACH MOTORHOME "Cross-Country," 31', fully equipped, awnings, below book. Rowe, 299-0961
- '72 MUSTANG MACH 1, needs body BICYCLE, Miyata 10-spd., 25" frame, \$125. Hubbard, 842-9431.
 - '86 HYUNDAI GL, 5-dr., 5-spd., AC, AM/FM cassette, \$6500. Johnson, 294-3250
 - '76 CHEV. Suburban, Silverado, AT, AC, PS, 454 V-8, 3-seat, AM/FM cassette, trailer hitch, 86K miles. Ney, 298-6329.

- '83 VANAGON, "Country Homes" conversion (camper to 7-passenger van), \$9700. Smith, 255-1228.
- 85 DODGE CONVERSION VAN, AC front and rear, PS, PB, PL, AM/FM cassette. CB. 4 captain's chairs, couch, 18K miles, \$13,250. Gabbard, 299-2819.

REAL ESTATE

- 3-BDR. HOME on 5 acres, Sandia Mtns., dedicated/maintained county road, 2300 sq. ft., \$129,500. Hobart, 281-5331
- 3-BDR. HOME, 1-3/4 baths, great room, stained woodwork, landscaped w/ sprinklers, 2-car garage, Heatilator FP, east of Tramway, \$84,500. House,
- 3800 + SQ. FT. HOME on 2 acres, ready to finish, open floor plan, views, owner/broker. Keefe, 889-0054, leave
- 3-BDR. HOME, LR, den w/FP, 2 baths, workroom, laundry room, 1650 sq.
- ft., \$69,500. Barger, 262-0143. 2-BDR. TOWNHOUSE, 1-1/2 baths, single garage, auto sprinklers, fenced yard, \$43,000. Schindwolf, 831-1940.
- 3 BDR. BRICK HOME, 1-3/4 baths, 2400 sq. ft., den, sunroom, fully landscaped, large backyard, paved play court, RV yard w/hookups, \$119,000. Hughes, 299-6674.
- 2-BDR. 1983 MOBILE HOME, 14' x 64' 1-1/2 baths, in Cedar Crest, van pool available, \$15,000 OBO. Helling, 281-5536 or 294-0582.
- 3-BDR, HOME, all-brick Mossman, off Comanche, 1-3/4 baths, 1560 sq. ft., pitched roof, FP, grass front and back, \$91,500. Gillings, 884-0853.

WANTED

- TWIN-SIZE MATTRESS, in good con-
- dition. Pilson, 892-9425 KODAK CAROUSEL PROJECTOR, in good condition. Mischke, 828-1610 after 6
- MID-SIZE CAR, reliable, for 2 students, approx. \$1000. McBride, 299-4347. ANGORA RABBIT FUR, already spun,
- any color. Anderson, 865-4494 AURORA HO-SCALE SLOT CARS. track and/or accessories, in work-
- ing condition. Kureczko, 298-1577. FULL-SIZE BABY CRIB and playpen. Underhill, 294-5774 after 6. WORDSTAR SOFTWARE for Data Gen-
- eral computer, will pay \$75. Herrera. 256-7011 4-WD VEHICLE, 70s vintage, Chev., Ford, or GMC preferred. Fisher, 881-
- 8072 SUMMER HOUSING for visiting professor from Colorado, house-sitting or rental, with wife and son. Rademacher, (303) 223-9369 or Div. 2613
- supervisor, 4-5905. NEW CHRISTY MINSTREL" albums, buy or borrow; World Book Encyclopedia, 1970 or newer. Lockwood, 821-6331.
- LOT to accommodate 14' x 80' mobile home, 1984 Fleetwood, close to Albuquerque. Reed, 821-6315.
- LARGE DOG CRATE, prefer either Doskocii #500 airline crate or coi lapsible wire crate w/bottom pan (at least 36"L x 24"W x 26"H). Siegrist,
- COPY OF "TRIBUTE TO THE DOG" SPEECH, famous court case closing argument. Lambert, 293-8825.

WORK WANTED

- HOUSE-SITTING, college senior will house-sit, care for pets, etc., references available. Cook, 296-3064.
- HOUSE-SITTING, painting, yard work, by college student, w/references. reasonable rates. Langkopf, 293-4076.
- AWN WORK, responsible teen will mow, water, and trim at reasonable rates in Juan Tabo/Indian School Rd. area. Perrine, 293-1429.

M Is for the Many Things . . . Tell Her on Sunday

MAMAS, DON'T LET your babies grow up to be cowboys. But even if they already have, chances are they're thinking of ways to make sure you have a super-spectacular day this Sunday. The answer, for cowboys and everyone else, is to head for the C-Club, where Manager Sal Salas and crew are pulling out all the stops in honor of Mother's Day. Anytime between 10 a.m. and 3 p.m. you can dine at the most bountiful buffet in town. And what a menu: baron of beef, Virginia baked ham with cherry sauce, carved turkey with giblet gravy, fried chicken (eat your heart out, Colonel Sanders!), green beans almondine, potatoes au gratin, western omelets, scrambled eggs, hash browns, bacon, green chile salsa, French rolls, pancakes, cheese tray, fresh fruit salad, chilled juices, vegetable tray, tossed salad, and (whew!) a medley of desserts. Throw in three Cs complimentary champagne (one glass to a customer) and carnations (for mamas only). This special family occasion available at very reasonable prices: adults, \$10.50; children ages 5-12, \$5.75; and tots 4 and under, free. Hurry, gang — this one's only two days away. Call in that reservation right now (265-6791).

CELEBRATED CINCO DE MAYO YET? If you haven't, don't despair. May 5 may have come and gone, but a big celebration fiesta is on tap tonight. Start out with the two-for-one special dinner (prime rib or scallops, choice of two entrees for \$14.95). Next, watch a very colorful floor show from 8 to 8:30 p.m. featuring Las Tapatias Dance Company. Topping it off, cha-cha the night away to the Latin music of the Freddie Chavez Foundation. Dinner reservations requested, please.

WATCH ROBIN HOOD and friends run circles around the Sheriff of Nottingham and Prince some-body-or-other tomorrow evening (May 9) at Family Night. Kid-pleasin' food (pizza, hot dogs, all that good kind of stuff) is featured at the low-cost buffet served at 5 p.m. The movie starts at 6; as usual it's free. Soft drinks and the obligatory popcorn available for a quarter.

Got the VCP Blues?

Still need some advice on what to do with that VCP distribution? You have several chances in the next two weeks to get up to speed on tax effects, IRA rollovers, investment options, and tax reform impacts. Here's the seminar schedule:

May 14 - E. F. Hutton (Greg Zanetti), 4:45-6 p.m., Eldorado room.

May 18 - Dean Witter Reynolds (Jim Mc-Caffery and Rodney Hotz), 4:45-5:45 p.m., Eldorado room.

May 19 - Rauscher Pierce Refsnes (Robert Cassell), 5-6:15 p.m., Eldorado room.

THEY'RE CIRCLING their prey (Las Vegas dealers, for the uninformed) at two wheel-and-deal sessions this month. Sharpening the table skills is what it's all about when the T-Bird card sharks get together on May 14 and May 28. Action starts at 10:30 a.m. both days. Put on your best poker face, bridge the gap, and shuffle on out.

QUESTION OF THE WEEK: What do Lawyers, Guns, & Money have to do with Western Night next Friday evening, May 15? Answer: That's the group that's playing the country/western music for your sagebrush-shuffling pleasure from 8 p.m. to midnight. With a name like that, they've *gotta* be good! The two-for-one chuck wagon special features filet mignon or shrimp scampi, so enjoy some terrific food before the lawyers — with their guns and money — take over.

MAY IS A MERRY MONTH - and it's merrier than ever in 1987 because there's a month-long open house to let folks find out about all the fabulous deals that C-Club membership buys. For the same reasonable prices that members now enjoy, nonmember Sandians and DOEans can enjoy two-forone specials, Mother's Day brunch, Western Night, Family Night — you name it. There's a special open house planned on Friday, May 15 (4:30-6:30 p.m.), to introduce you to the finest pool/patio facility in the Southwest. If you join the Club that night, you not only get a discount on a one-year membership, but also a discount on your summer pool/patio pass; free soft drinks, beer, and munchies thrown in. Now is the time for all you savvy investors to get with the program!

RETIREES REVEL on Thursday, May 21, at their annual picnic. For the rest of us, that means something else: no lunch service at the Club that day. But cheer up — in a few years, we too can join that riotous celebration . . .

THE STAGECOACH FROM ISLETA makes a stop at the C-Club on Friday night, May 22. First-class passengers are none other than — you guessed it — those good ole Poor Boys with their special brand of c/w music. Enjoy it from 8 p.m. to midnight, right after the two-for-one featuring prime rib or halibut. Help out the cow catchers and the fish catchers in the C-Club kitchen by calling in that dinner reservation — the sooner, the better.

SPLISH, SPLASH, WE'RE ALL AT THE BASH — on Monday, May 25, from 11 a.m. to 6 p.m. The grand opening celebration in the pool/patio area is a fine way to spend your Memorial Day holiday. Along with their cannonball specials, kids enjoy lots of games all day (a bunch of prizes too). From noon to 5 p.m., some super food's available at a BBQ buffet set up under cover on the patio. A local DJ provides all-day music for your after-swim dancing pleasure. It's free admission for Club members, and \$2 for guests. Look out, summer — here we come!

NEXT BIG-WHEEL RALLY for the Thunderbird Roadrunner RVers is May 26-28 at Villanueva State Park (40 miles southeast of Santa Fe). More info from wagonmasters Duane Laymon, 822-1749; Tom Brooks, 344-5855; or Bill Minser, 299-1364. LOOKING FOR A PLACE to throw a paragon of a party? We know just the spot: the C-Club pool/patio area. Your guests have a blast, and you don't have to slave away over a hot hamburger grill. Cost is as low as \$1.50/person. As for food — it's available (everything from hot dogs and burgers to full dinners). Give catering honcho Maggie Pappas a call (265-6791) for more info. Don't put it off too long, though; summertime is party time, and facilities as good as this one are in great demand.

WHAT A DIFFERENCE A DAY MAKES, and you'll find out why when you sign up for some of the terrific trips planned by the C-Club Travel Committee:

Rocky Mountain High — A five-day trip to cool Colorado is on tap next month (June 3-7). Speaking of "on tap," this one gives you a chance to sample that Rocky Mountain spring water at the Coors Brewery in Golden. Other stops are Leadville and Central City, Denver, Colorado Springs, and Alamosa. For \$248/person, you get four nights' lodging, admission to a bunch of places, and a dinner show at the Flying W BBQ in Colo. Springs.

Yukon Yardage is what you'll cover next September when you're on the big Alaskan adventure. Opt for either a land/cruise or cruise-only trip in that great state up north. The land/cruise package (Sept. 8-20) covers city tours of Anchorage and Fairbanks, a visit to Mt. McKinley National Park (and a ride on the McKinley Explorer train), and stern-wheeler cruise as part of your stay in Fairbanks. Cruise-only types join the group on Sept. 13 for a week-long cruise along the rugged Alaskan coastline aboard the Regent Sea, which offers every possible amenity. Ports of call include Juneau, Ketchikan, Skagway, and Vancouver. Cost of the complete land/cruise package is \$2324/person (double); cruise-only folks pay \$1642. Included are all meals aboard the Regent Sea, all transportation costs (land/sea/air), lodging along the way, and taxes/tips. You get a price break on triple or quad occupancy, and final payment isn't due until July 20.

Congratulations

To Carol (2560) and Ed (1152) Vernon, a daughter, Dagny Anne, April 13.



WORK EXPERIENCE TRAINEES (from left) Veronica Grado (2614), Lenora Baca (2613), Tisha Brooks (3533), and Cecilia Padilla (3718) headed for Des Moines, Iowa, this month to attend the national Office Education Assn. conference. Tisha, as secretary of the New Mexico OEA, attended as a state delegate. Veronica, Lenora, and Cecilia placed in the top five in statewide office skills competition (separate categories), and represented New Mexico in national competition at the Des Moines conference. Sandia's 24 work experience trainees — all high school seniors — attend classes in the morning and work afternoons at Sandia, according to Soila Brewer (3533), program coordinator.